

BUSINESS WEEK

DEC. 13, 1947



Alvin E. Dodd, 1947 Gantt medalist: For building a management forum (page 6)

A MCGRAW-HILL PUBLICATION





The Story of the Colossal Mr. Kier

In a dimly lighted cellar in Pittsburgh almost a century ago, Samuel Kier sat as he anxiously observed the flickering flame of an oil lamp. If the flame would burn evenly and without odor from the oil being consumed, then Kier's "purification" process of crude petroleum would be a success. Moreover, his tireless efforts in experimenting with thousands of lamps and his countless months of distilling "crude" would be rewarded with handsome profits from his discovery of a method for refining and commercializing a heretofore worthless product of nature! The ensuing success of Samuel Kier as the world's first refiner of petroleum was attested every time an oil lamp was lighted the world over for decades after his cellar experiments. His unprecedented discovery of petroleum refining, the result of years of patient courage and fortitude, marked the birth of the colossal oil refining and marketing industry as we know it today!



The invention of the HUGHES ROCK BIT in 1909 marked another unprecedented milestone in petroleum history! With this new and unique device, penetration of all sedimentary formations to greater depths was made possible. The attendant volume production of petroleum resulting from expanded drilling activity upon the introduction of Hughes Rock Bits created the necessity for the building of gigantic oil refineries. The resultant manufacture of low-cost motor fuels and lubricants accounted for mass production in the automotive industry and American transportation methods were revolutionized! These great factors in our free enterprise system of economy created a prosperity to which every American is beneficiary! In performance, scientific design, engineering superiority, and leadership HUGHES ROCK BITS have been known for almost a half century as the "World Standard of the Industry."



HUGHES TOOL COMPANY
HOUSTON, TEXAS

WORLD STANDARD OF THE INDUSTRY

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hundred million men, women and children (over 10 years old)
every corner of the nation listen *each week* to CBS.

For there are 27,253 individual CBS broadcasts a year:
consistent week-in, week-out pattern of *top-network* programming,
spanning the entire range of the best in Radio.

And wholly independent data show that these programs
are the *most effective* in all Radio; gathering audiences for CBS advertisers
at less cost than *any* other network's programs.

Behind these programs stand the resources of the complete CBS network,
including the *largest Program Department in all Radio*
—and the resources of the great companies who so consistently sponsor
CBS's most popular programs, *including more of the largest*
users of Radio than appear on any other network.

But behind these are the American people themselves, who created
Radio in this country in their own image; with all the vitality,
richness, and criss-crossing patterns of culture, of America itself.

Nowhere else in the world does Radio approach the rich quality
of American Radio, which broadcasts many more serious programs
and many more popular programs in any week than are heard
in other countries in months.

And nowhere else have the people themselves made of Radio
such a tremendous social and selling force . . . *still growing!*

Comprehensive studies show that the average U.S. Radio family
is listening more in 1947 than in *any* previous year:
4.6 hours a day, for a total of 165,000,000 family-hours
of *daily* family listening in America.

They listen . . . and in survey after survey the American people
also vote Radio their *first* preference in entertainment,
and their *first* source of news.

How they judge CBS programs is shown simply and conclusively.

For 99,000,000 people now gather every week at CBS
—more people than ever before in CBS history—to get the latest
news and laughter, music and drama, ideas and goods.
And whether you measure their listening to “average” programs,
or to “top” programs alone, you find that CBS today
delivers larger audiences to its advertisers,
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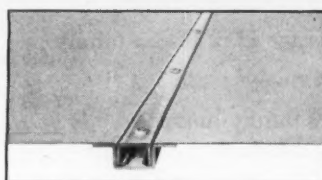
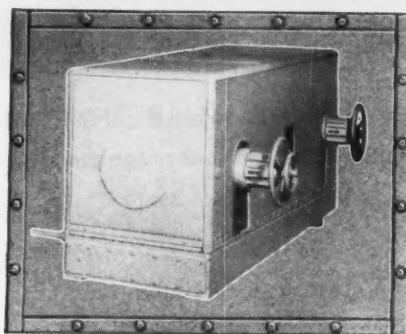
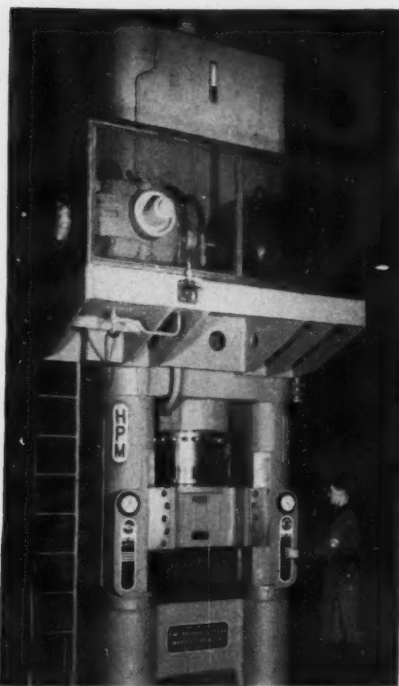


Here's How HPM. Capitalizes Lindsay Structure

● For protection and strength and visibility in its guard rails, Hydraulic Press Manufacturing Co. uses Lindsay Structure panels made with expanded metal sheets. Standard LS construction is used for enclosing their control unit.

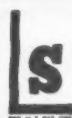
Here where specialized requirements of many customers necessitates "tailor-made" units, Lindsay Structure finds many applications. Its wide versatility—its ease of assembly—its very favorable strength-weight ratio—represent advantages and economies here as well as in line production.

If you are building partitions or cabinets—big machinery or food lockers—it will pay you to get information on this new method of light sheet metal construction.



Assembled with screws, the panel sheets are held under uniform tension between framing members.

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U.S. Patents 2017629, 2263510, 2263511
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THE MODERN METHOD OF LIGHT SHEET METAL CONSTRUCTION

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ADVERTISING MANAGER
H. C. Sturm

BUSINESS WEEK • DECEMBER 13 • NUMBER 10
(with which are combined The Annalist and the Magazine Business) • Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw, Founder and Chairman • Office: 1221 North Dearborn Street, Albany 1, N. Y. Return postage guaranteed • Editor and Executive Offices, 330 W. 42nd St., New York 1 • James H. McGraw, Jr., President; Curtis W. McGraw, Senior Vice-President and Treasurer; Nelson Bond, Jr., Vice-President; Eugene Duffield, Editorial Assistant; President; Joseph A. Gerardi, Secretary • Address correspondence regarding subscriptions to J. E. Blackburn, Director of Circulation, Business Week, 99-125 N. 1st St., Albany 1, N. Y., or 330 West 42nd St., New York 1 • Allow ten days for change of address. Single copies 10¢. Subscription rates—United States and possessions \$5.00 a year, Canada \$6.00 a year, Pan American countries \$7.00 a year • All other countries \$8.00 a year • Entered as second class matter Dec. 4, 1936, at the Post Office at Albany, N. Y., under Act of Mar. 3, 1879 • Printed in U.S.A. Copyright 1947 by McGraw-Hill Publishing Co. Inc. Rights Reserved.

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IN THE DARK SILENCE OF THE NIGHT

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That light is the light of the Bell Telephone Exchange. That voice is the voice of your telephone. Its very presence brings a feeling of security, whatever the need or the hour.

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BW 12-13

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THE COVER

This year's recipient of the Gantt Memorial Medal, "for distinguished achievement in industrial management as a service to the community," is Albert E. Dodd. His work as president of the American Management Assn. since 1936 gained him that honor. Specifically, the award was made for: (1) his leadership in making management more aware of its social responsibilities; and (2) his success in building the A.M.A. into an authoritative management forum.

• **Meeting**—Dodd, who is 64, was given the Gantt Medal last week. The award was made in Atlantic City during the annual meeting of the American Society of Mechanical Engineers.

In accepting the honor, Dodd affirmed his confidence in the American economic system. But he challenged employers to keep up with changing social ideas. Management must manage, he said. But he predicted that the most important single future trend in business will be group responsibility of employees in "specific areas where they can make a real contribution."

Employees want more out of the work than money, he said. They want to feel important, to understand the business they work in.

• **Jobs**—Dodd is no ivory-towered theorist. Since World War I he has been active in personnel, marketing, and distribution. During that war he served as a personnel adviser to the Army, as head of the war service commission of the retail dry goods industry. He was also director of the Retail Research Assn. Dodd set up a market research group for the retail field, saw it grow into the Associated Merchandising Corp. As its head, he established and coordinated buying offices in the U. S. and in European countries.

From 1921 to 1927 Dodd managed the distribution department of the U. S. Chamber of Commerce. Then he spent two years as director-general of the Wholesale Dry Goods Institute. In 1929 he was made assistant to the president of Sears, Roebuck & Co., building up their retail stores. As vice-president of Kroger Grocery & Baking Co. from 1930 to 1934, he set up a personnel program and modernized merchandising and distribution methods.

• **Employment Key**—Dodd became executive vice-president of the A.M.A. in 1934, president two years later. In A.M.A.'s 1945 report Dodd stated that business, not the government, held the key to continuous high-level employment. The guiding thought behind the A.M.A., according to Dodd: "The most serious threat to the executive is his own managerial obsolescence."

ER BUSINESS OUTLOOK

BUSINESS WEEK

NOVEMBER 13, 1947

SERVICE

Prices point still higher in the months ahead. Nothing is likely to stop them except a dose of recession. (Pricing consumers out of the market could cause such a recession in business activity.)

This week's Administration bill to control critical commodities isn't any answer—even if it could pass. Formal allocations wouldn't work any better than present voluntary ones; price ceilings would be flouted.

Action that could be taken, won't be—or at least not in time.

Here are some things to watch in trying to figure which way prices are going—and how far—in the next six months or so:

Retail sales volume for the Christmas season;

Wage increases' impact during and after the "third round";

Crop and food prospects next spring and summer.

Present hope of retailers is to do a record dollar business this Christmas (page 26). However, unit volume appears to be below 1946.

Whether the stores hit dollar goals or not is critical pricewise.

This can mean the difference between stores buying to fill bare shelves in January or shutting off orders to clear warehouses.

Wholesalers' and manufacturers' new orders will be affected accordingly. Finally, employment and purchasing power will be influenced.

So far, New York is making the poorest showing. Gotham's department store sales were only 1% ahead of a year ago in the last week of November and the first week of December.

A soft goods letdown like the one after last Easter may be in sight.

Price trends between now and March will influence the size of unions' wage boost demands.

If prices were to level out, unions might settle for 10% or less.

And what if prices were to decline? Nobody has given that much thought; 18 months of inflation have got us out of any such habit.

Anyhow, just suppose retailers aren't buying in January and February. Manufacturing activity would suffer, unemployment rise. And rising joblessness is no backdrop for a determined drive to raise wages.

This is a key to manufacturers' costs—and to consumers' prices.

Food costs are certain to rise next spring unless (1) housewives have less to spend, or (2) crop prospects improve unexpectedly.

Meat will be far short of demand by April. Even now, at the peak of seasonal slaughter expansion, prices once more are pointing up.

Late winter reduction in slaughter normally is cushioned by storage stocks. But, with demand what it is, into-storage movement is skimpy.

Food supplies and prices threaten to undo some of the improvement that has taken place in the national diet since 1939.

High feed costs aren't just driving meat animals to early slaughter. They are causing unusually close culling of dairy herds and poultry flocks. That means less milk, butter, cheese, poultry, and eggs in 1948.

Domestic demand for grain will be smaller next fall than this.

That's one of the unplanned advantages of reducing livestock numbers,

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
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and this could carry with it new advantages of its own. For one thing, we could more easily meet Europe's need for bread grains; or, again, grain prices might decline, thus turning the livestock cycle up again.

Both these chances would be thwarted, however, if 1948 harvests were reduced in proportion to the decline in grain-eating animals.

This is possible. The rains came, and they helped (BW-Nov.22'47, p10). But they may still have come too late.

Acreage is 5% to 10% below last year. Early-planted winter wheat is up to thin stands; late-planted is tender, very susceptible to winterkill.

A thick blanket of snow now is needed to protect winter wheat in the Great Plains—and also to get corn off to a good start next summer.

Food planners have their own wheat worries even before they stop to think about what next autumn's harvests hold in store.

Wheat—and flour—will be very short in the weeks immediately before harvesting of the new crop starts in July. That is sustaining grain prices now (in the face of the Administration's drive to curb speculation), and it will send them soaring if new crop prospects deteriorate at all.

That's one more keg of dynamite in the inflation powderhouse.

Against inflationary pressures, the federal government's weapons aren't too powerful.

Best of all will be the handsome Treasury surplus in the first half of 1948. That is just so much money consumers won't be able to spend in bidding up prices. Beyond that, it is money to be used in paying off government bonds which tends to restrict the volume of bank credit.

Direct credit controls won't get far. Raising the Federal Reserve Banks' rediscount rate long ago lost all its real potency and most of its psychological influence.

Congress probably won't pass Marriner S. Eccles' plan for higher bank reserve requirements. Even if tried, this program would be much more likely to crush the boom than just to regulate the inflation.

Industry's confidence in the outlook for the first quarter of 1948 certainly doesn't allow for any recession in business or price weakness.

Most manufacturers are quite willing to contract ahead for materials needed to sustain operations at the high rate of recent months. They aren't quibbling about prices. If anything, they are willing to bid up.

The "gray market" in steel still reflects this; so does the growing firmness in the nonferrous metals.

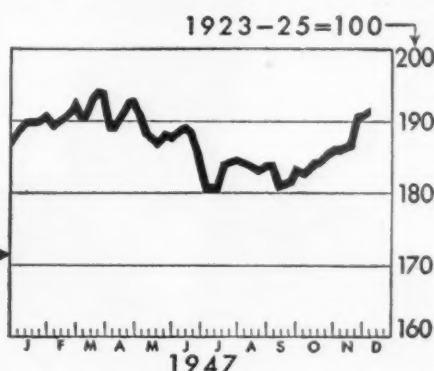
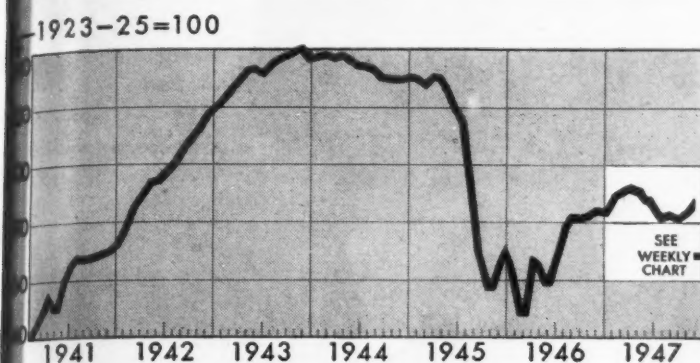
This week's price developments are strictly on the up side. Commodity markets generally have reversed the previous few days' downtrend.

All petroleum buyers have followed last week's crude oil rise (BW-Dec.6'47,p104), and some have passed it along on refined products.

Rayon yarn has been marked up 10%; tinplate by 85¢-\$1.05 a base box; brass ingot by ½¢-1¢ a lb.

International Harvester, which bucked the price trend with cuts last March (BW-Mar.15'47,p16), has announced a 5% boost on many types of farm equipment. And General Electric is reported no longer to be quoting firm prices for distant deliveries of central station equipment.

FIGURES OF THE WEEK



Business Week Index (above)

\$ Latest Week	Preceding Week	Month Ago	Year Ago	1947 Average
*191.9	191.2	186.4	178.2	162.2

PRODUCTION

Steel ingot operations (% of capacity).....	97.7	97.7	96.9	69.8	97.3
Production of automobiles and trucks.....	109,728	†84,391	106,651	93,907	98,236
Engineering const. awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$22,929	\$25,699	\$20,895	\$14,900	\$19,433
Electric power output (million kilowatt-hours).....	5,218	4,983	5,057	4,673	3,130
Crude oil (daily average, 1,000 bbls.).....	5,265	5,257	5,240	4,695	3,842
Bituminous coal (daily average, 1,000 tons).....	2,418	†2,217	2,142	410	1,685

TRADE

Miscellaneous and L.C.L. carloadings (daily average, 1,000 cars).....	89	89	92	88	86
All other carloadings (daily average, 1,000 cars).....	61	61	65	35	52
Money in circulation (millions).....	\$28,817	\$28,725	\$28,635	\$28,906	\$9,613
Department store sales (change from same week of preceding year).....	+10%	†+9%	+13%	+3%	+17%
Business failures (Dun & Bradstreet, number).....	60	72	72	37	228

PRICES (Average for the week)

Spot commodity index (Moody's, Dec. 31, 1931=100).....	454.8	458.7	447.0	370.1	198.1
Industrial raw materials (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	292.1	†294.2	290.6	258.2	138.5
Domestic farm products (U. S. Bureau of Labor Statistics, Aug., 1939=100)...	410.3	409.3	392.4	311.3	146.6
Finished steel composite (Steel, ton).....	\$76.09	\$76.09	\$76.09	\$64.45	\$56.73
Scrap steel composite (Iron Age, ton).....	\$40.25	\$40.25	\$41.50	\$25.00	\$19.48
Copper (electrolytic, Connecticut Valley, lb.).....	21.500¢	21.500¢	21.500¢	19.500¢	12.022¢
Wheat (Kansas City, bu.).....	\$3.04	\$3.09	\$2.93	\$2.05	\$0.99
Sugar (raw, delivered New York, lb.).....	6.32¢	6.32¢	6.32¢	5.57¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	35.85¢	35.64¢	32.75¢	31.48¢	13.94¢
Wool tops (New York, lb.).....	\$1.840	\$1.840	\$1.863	\$1.640	\$1.281
Rubber (ribbed smoked sheets, New York, lb.).....	20.25	22.50¢	23.88¢	22.50¢	22.16¢

FINANCE

100 stocks, price index (Standard & Poor's Corp.).....	117.2	119.2	121.7	119.3	78.0
Medium grade corporate bond yield (30 Baa issues, Moody's).....	3.50%	3.49%	3.42%	3.18%	4.33%
High grade corporate bond yield (30 Aaa issues, Moody's).....	2.85%	2.82%	2.74%	2.61%	2.77%
Call loans renewal rate, N. Y. Stock Exchange (daily average).....	1½-1½%	1½-1½%	1½-1½%	1½-1½%	1.00%
Prime commercial paper, 4-to-6 months, N. Y. City (prevailing rate).....	1½%	†1½%	1-1½%	1%	½-½%

BANKING (Millions of dollars)

Demand deposits adjusted, reporting member banks.....	48,247	47,982	47,452	46,681	††27,777
Total loans and investments, reporting member banks.....	65,027	65,042	64,910	66,087	††32,309
Commercial and agricultural loans, reporting member banks.....	14,358	14,267	13,971	11,253	††6,963
Securities loans, reporting member banks.....	1,864	1,850	1,821	2,832	††1,038
U. S. gov't and gov't guaranteed obligations held, reporting member banks.....	37,560	37,724	37,982	42,855	††15,999
Other securities held, reporting member banks.....	4,238	4,219	4,234	3,902	††4,303
Excess reserves, all member banks.....	880	1,010	1,010	669	5,290
Total federal reserve credit outstanding.....	22,830	22,934	22,640	24,585	2,265

*Preliminary, week ended December 6th.

†Revised.

‡Ceiling fixed by government.

§Date for "Latest Week" on each series on request.

††Estimate (B.W.—Jul.12'47,p16).



It pays to **CONSULT YOUR INSURANCE AGENT**
AS YOU WOULD YOUR DOCTOR OR LAWYER

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WASHINGTON OUTLOOK



INDUSTRIAL SELF-GOVERNMENT— NRA style—is the G.O.P. answer to inflation, for now.

It's the only out the Republicans can see from political predicament that Truman put them in when he called for restoration of price controls and rationing (BW-Nov.22'47,p25).

Here is the picture in Republican minds:

Industry committees would be formed, would work down with government men to agree on price controls, allocation of scarce goods, product standardization.

Labor committees would also be formed; the first step here would be to headoff a third round of wage increases.

To keep industry men who go along with this scheme out of jail, legislation is needed. That's the purpose behind bills to waive antitrust laws as to this program.

How much of this sort of thing will there be?

The Republicans are leaving that up to Truman. They're not thinking about any special emergency agency for the job. But if Harriman wants to get in some steel people, for instance, to decide who gets how much steel—then the G.O.P.'s law would allow the industry men to talk turkey.

Harriman likes this, as far as it goes. He has the same antitrust exemption in the Administration's inflation-control bill submitted this week. But he is convinced that to make any voluntary agreement work he needs compulsion powers in reserve. (He won't get them—at first anyway.)

Harriman's bill does show where he thinks the problems are; where, therefore, he will try voluntary methods: steel, grains, fats and oils, soap, meat, and dairy products. Some degree of government guidance of the steel industry's distribution system will be the first move.

Beyond this formalized voluntary scheme, Republicans are willing to extend the remnants to war controls that are due to expire next March.

EASY CREDIT for house-building may have to be sacrificed to inflation control.

Housing Administrator Foley is getting ready to suggest to Congress that the FHA mortgage system be tightened up. Under Foley's plan, FHA would guarantee no loan of more than \$9,000 on any

single family house. Mortgage ceiling on two-family buildings would be \$13,500; three-family, \$17,500; four-family, \$20,000.

At the same time, Foley wants larger down payments, lower appraisals.

House Banking Chairman Wolcott has similar ideas. But congressmen dread the wrath of the builders' and veterans' lobbies.

HALF-HEARTED INFLATION CONTROL is piling up real trouble for the Marshall Plan.

The pessimists around Washington—in the departments and on Capitol Hill—are thinking ahead to next spring. They realize that there may be a bad wheat crop, a meat shortage, wage boosts, fast-rising prices—all just at the time that Congress is debating the Plan.

What gives way? Will Congress do a flip-flop and pass firm controls? Or will it try to ease the strain by slashing aid to Europe?

Even now, men like Vandenberg are afraid of what Congress' answer might be. Vandenberg was shocked last week that a third of his colleagues voted to cut \$197-million out of the interim aid bill despite his plea not to "throw a 15-foot rope to a man drowning 20 feet from shore."

FIVE-YEAR AMORTIZATION for tax purposes on all new plant and equipment investment is not on the G.O.P.'s tax docket for next year—despite appearance this week of a hastily drafted bill by Sen. Capehart and Rep. Grant.

Even if Congress did O.K. the idea, it would run into a certain veto; the inflation-conscious Administration wants to snub plant expansion, defer it to less booming times.

But quick amortization may get action at the next session—on a selective basis.

Behind the scenes in Congress and at Treasury, there's talk of a tax concession for new plant that would ease key shortages—steel and oil, for instance.

Permission for a five-year writeoff of such plant might be tied to some proof of necessity (1) for national defense or (2) for the Marshall Plan.

Exemption of the first \$25,000 of corporate income from taxation is being pushed for inclusion in next year's tax-cut bill.

The idea originated with Rep. Ploeser, simply as a way out of the impasse his co-op inquiry had

WASHINGTON OUTLOOK (Continued)

run into (BW-Sep. 13'47, p6). Ploeser's scheme for taxing co-op refunds to members stirred angry cries from midwestern farmers; the exemption for business is designed to give small corporations tax-free status too.

Heavy and favorable fan mail in answer to the idea convinces Ploeser and tax boss Knutson that they may have something.

BOSS OF JAPAN may be Gen. Thomas Handy—if Gen. MacArthur comes back to the States in the spring.

High Army brass, including Eisenhower, would like to see Handy become Chief-of-Staff after Bradley, who talks of staying in that job only a couple of years. So the Handy-men are boosting him for a limelight spot in the interim.

Handy now commands the Fourth Army. He was Marshall's Deputy Chief-of-Staff in the late months of the war; before that he was in Operations.

JURISDICTIONAL FIGHTS in the building trades may go to joint arbitration by employers and unions, as a result of the Taft-Hartley act.

A.F.L.'s building trades unions are talking to contractor groups about setting up a joint arbitration panel to do the job.

The panel would be a permanent board of equal union and management membership, with a neutral chairman.

Objects: (1) to keep these internal labor fights from reaching NLRB; (2) to avoid injunctions and possible lawsuits under the Taft-Hartley act.

Contractor participation is necessary to get voluntary acceptance by employers of work assignment decisions. (Taft-Hartley makes it "unfair" for a union to require an employer to assign particular work to a union without NLRB certification.)

Associated General Contractors favors the A.F.L. plan; all but two of its 104 chapters have indicated support.

Two hitches remain to be ironed out:

(1) A.G.C. feels it should have equal voice in selecting the neutral member; A.F.L. argues that jurisdictional problems are internal matters and so it should control the panel.

(2) The method of picking employer members isn't settled. A.G.C. wants to name the panel; A.F.L. wants to see all major contractor outfits represented.

NLRB is watching progress of the negotiations hopefully. It shudders at the prospect of having to tackle this tangled field itself.

FEDERAL POWER POLICY is getting a microscopic re-examination by the technical staff of Taber's House Appropriations Committee.

The study covers all power legislation, as well as activities of all federal power agencies. The report is due around the year's end.

Probable recommendations:

(1) Increased rates for some projects—make them pay out faster.

(2) Sale of federal energy to private utilities at the generating plant.

(3) Uniform bookkeeping on all government projects.

Taber plans to hand the findings to the House Public Works & Public Lands Committee, which initiates power legislation. And he threatens to hold up money for new and old projects until other committees heed the recommendations.

MAYOR HUBERT HUMPHREY of Minneapolis is being groomed as an anti-Communist labor candidate to unseat Sen. Joe Ball in the 1948 election.

A.F.L. took Humphrey all the way to San Francisco to address its annual convention. Humphrey is fronting for a U.A.W.-C.I.O. protest to Michigan's Gov. Sigler over use of the state fair grounds for sports events banning nonwhites.

Minnesota business groups are worried about it all. They are quietly looking for a "war hero" as a third candidate.

But Joe Ball has a bigger worry than all that. Minnesota law permits senatorial candidates to file as late as August next year. After the June G.O. convention, Stassen might decide the Senate looks pretty good.

• Thomas K. Finletter, head of the President's Atomic Energy Policy Commission, is Truman's first choice to succeed Assistant Secretary of State Benton in charge of propaganda and the Voice of America. . . .

• A month before the Dec. 31 deadline, less than 10% of the nation's renters had signed the "voluntary" rent-increase leases provided in last spring's extension of rent control. . . .

• "Third-Quarter 1947 Sweater Production Made Best Showing of the Year," the Commerce Department gloats in an industry report this week.



THE PROBLEM, DIFFERENT POLICIES distinguish the labor relations procedures of James H. Rand, Jr. (left), and Henry Ford II

Will Rand Lead a Parade?

Remington Rand breaks off all relations with C.I.O. electrical workers after NLRB ruling; U.E. did not qualify as non-Communist. Now all contracts with such unions are in doubt.

U.S. Steel Corp. no longer has to deal with the C.I.O.

Owners of the coal mines are no longer under any legal responsibility to deal with John L. Lewis.

General Electric and Westinghouse are maintaining relations with the union of their production workers on their own choice. So is Gimbels'. So is Macy's. So are the longshore firms on the West coast waterfront. So are all employers of interstate commerce whose unions have failed to qualify for access to the National Labor Relations Board under the Taft-Hartley act.

The Law for This Week—Such is the state of the law this week. It got that way because of a petition that Remington Rand, Inc., filed with NLRB under provision of the new labor law (BW—v.29'47,p68). That provision enables employers to ask the board to decide questions of union representation. Remington asked the board whether C.I.O.'s

United Electrical, Radio & Machine Workers (U.E.) still represents a majority of its 10,000 employees in seven of its plants.

NLRB said it was none of the company's business.

What that means is that Rem Rand's inquiry has proved to be like sowing dragon teeth and reaping soldiers. It has developed what is almost sure to be the most embattled labor issue of the next six months.

• **NLRB's Reasoning**—NLRB dismissed the company's petition on the ground that U.E. had forfeited its right to any legal standing. This reasoning was based on U.E.'s failure to qualify for access to NLRB by refusing to have its officers swear that they were not Communists. Under these circumstances, no determination of the union's status could be made, according to the board. NLRB ruled: Remington Rand was in error in assuming that any question of represen-

tation could exist; U.E. is no longer a "legal" organization.

Such a finding has the effect of stripping U.E. of its certification as collective bargaining agent in Rem Rand plants.

• **Warning to Employers**—Of even greater significance, however, was the warning of Robert N. Denham, general counsel of the NLRB. He said that the company would act "at its own peril" if it continued to deal with the union. As a direct result of this "official advice," Remington Rand has broken off all relations with U.E. Its position today: It recognizes no union as representative of its employees in the seven "former" U.E. plants.

In reply, U.E. is moving cautiously but with determination. It takes the position that an agreement it signed with James H. Rand, Jr., company head, last July, at the end of a strike, grants it recognition until April, 1949. It demands that the company abide by this agreement—NLRB, Denham, and the U. S. Supreme Court to the contrary notwithstanding. It has indicated that it will first proceed in the courts to protect its "contract." But U.E. has said that if its "contract rights" are undermined in the meantime, it will rely on its "membership strength." In other words, it will strike.

• **Peril**—Denham's "official advice" to employers about proceeding at their own peril in continuing relations with non-qualified unions has a widespread impact. It applies to every employer who deals with U.E., the steelworkers union, the coal miners, and the scores of other labor organizations which have not qualified under the Taft-Hartley act.

Some, like U.E., are presumed to be unable to qualify because they have alleged Communists among their officers. Others, like the steelworkers and coal miners, have refused to qualify on grounds of principle. But now all are in the same boat. The only difference between them is that some can get out of that boat when they want to.

• **Legal Liability**—The "peril" that Denham refers to is a legal liability. An employer exposes himself to it by dealing with a noncertified union. Under the T-H law, this is an infringement of the rights of "legal" unions which may have an interest in the situation; it is an unfair labor practice which leaves the employer open to injunctions, fines, and imprisonment.

Thus, a heavy cloud of uncertainty has a large section of the labor front under its shadow. While few important employers are expected to follow the Remington Rand lead, the status of

unions all over the country is up in the air. What lies ahead is still too unpredictable for most managements to bank on.

• **Different Approach**—For instance, Ford Motor Co. has adopted a far different approach in dealing with the problem. International officers of the United Auto Workers (C.I.O.) have filed non-Communist affidavits with NLRB. But the left-wing Ford local has not, so it can't qualify for NLRB protection of its bargaining rights. However, the company is still dealing with the local.

Last week Henry Ford II dramatized his policy—and at the same time gave subtle aid to the U.A.W. right-wing—by paying a surprise visit to Walter Reuther, U.A.W. president. The pleasantries they exchanged were a boost for Reuther's drive to rid the union of left-wing influence.

But many employers will watch Remington Rand's strategy closer than Ford's. They will mark time until Rem Rand explores the ground—as it is determined to do. For the present, it will proceed by sitting back and letting U.E. try to do what it can to work its way out of a box.

VA Nightmare

Federal agency faced with \$80-billion problem in G.I. insurance payments; awaits ruling by Supreme Court.

The National Service Life Insurance law is giving federal lawyers and Veterans Administration officials green-backed nightmares. And there'll be no letup until the Supreme Court rules on an interpretation of the law which could add as much as \$80-billion to government obligations under the G.I. insurance.

The Supreme Court this week accepted a government appeal from a Seventh Circuit Court decision that would, in effect, put the VA in the position of selling \$2 bills for \$1.

• **Two Options**—Besides a lump sum payment, the G.I. insurance offers two main settlement options for paying survivors when a policyholder dies. Both of them are copied from the ordinary practice of commercial insurance companies. Under one option, the bene-

fiary is paid a monthly income for life. The amount of these payments is based on the size of the policy and age of the beneficiary at the death of the insured. Payments stop when the beneficiary dies.

Another option includes a "10 years certain" provision. The beneficiary accepts a slightly lower monthly payment and in return is guaranteed at least 120 monthly payments. If the beneficiary dies before the ten years are up, payments will be continued to a second beneficiary until 120 have been paid.

• **VA Interpretation**—At least that's the way VA has been interpreting the law in the law that authorizes payment of the insurance "... in equal monthly payments for 120 months certain, such payments continuing during the remaining lifetime of the beneficiary."

Tillie Zazove, a beneficiary under a \$5,000 policy, claims that the language of the law means she must be paid the full \$5,000, with interest, in 120 months—and that these payments must be continued for life. For her, it would mean a monthly payment for the rest of her life of \$48.09 instead of \$29.50.

• **Insolvency**—For VA this would mean insolvency. G.I. policyholders are entitled to take any settlement option they want; lapsed policies can be cashed at any time. Presumably each one would start mining this bonanza.



Club Plan for Club Steaks—At Wholesale Prices

In Philadelphia, butcher George Rookstool (above) can get it for you wholesale—if you pay \$1.25 weekly dues. And the idea is snow-balling nationally with chain-letter intensity.

Here's how it works: The fixed weekly charge permits you to buy meat at wholesale levels; there's no limit on purchases. Rook-

stool figures that the consumer saves at least 25% (if she buys enough), thus gets a week's free meat every month. And with a "membership" of 800, the butcher is assured of a take of \$1,000 a week. The idea is going great guns in Denver and St. Louis; in the latter it has even resulted in nickel beers and 15¢ highballs.

NEW K-F STEEL SOURCE

Another source of sheet steel has been acquired by Kaiser-Frazer Corp. Portsmouth Steel Co., in which it owns a big chunk of stock, has announced recent purchase of a steel mill from John P. Ludgate Associates, Pittsburgh. The facilities include a high breakdown mill and two 24-inch sheet mills of the old hand mill variety.

The equipment, which has an annual capacity of 100,000 tons, this week is being moved from Sault Ste. Marie, Ont., to Portsmouth, Ohio. Purchase price was approximately \$275,000. Portsmouth Steel hopes to get the mill into operation as a mechanized continuous sheet mill during the second quarter of 1948.

JOHNS-MANVILLE EXPANDS

Johns-Manville Corp. last week bought Van Cleef Bros., Inc., of Chicago—makers of "Dutch Brand" automotive and industrial rubber products.

Van Cleef's automotive products include gasket shellac compounds, hydraulic brake fluid, and tire-repair materials. For other industries it makes such items as liquid cements, moldings, sponge-rubber products, a variety of commercial and industrial tapes.

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WHERE THE MONEY MIGHT GO if the State Dept.'s plan for reconstruction and development of China is approved by Congress and carried out

Marshall Plan for China

Truman to ask Congress for \$300-million to wipe out China's trade deficit. Supplementary program calls for giving military aid, rebuilding and developing keys to nation's economy.

The Administration is getting ready to unveil a Marshall Plan for China to parallel the European Recovery Program. Congress will get its first look at this second Marshall Plan next month, when Truman will ask for \$300-million to help China.

Actually this will be only a first step. **Additional Aids**—Other steps that the Administration would like to see taken include military aid and a program of reconstruction and development. Military aid would include supplying munitions and some specialized military training. Rehabilitation would cover rebuilding key transportation links and developing projects to bolster China's economy.

The State Dept. for months has been busy about its dormant China policy—partly as a bargaining device with Chiang Kai-shek, partly to avoid shocking Congress with too many foreign-aid programs at once. State has actually been sending off Republican efforts to put

\$60-million for China into this winter's interim aid program.

But the Administration is convinced that China is the key to stability in the Pacific, that it is potentially a great industrial power. Also it feels that China rather than Japan is the most promising barrier to Russian expansion in Asia. All the real strength Japan ever had came from its access to Chinese resources.

• **First Step**—The \$300-million first step is to meet China's trade deficit; it's now running at about \$20-million a month. The Chinese government's remaining \$400-500-million hoard of gold and dollars is now being drained away to cover imports. Hope is that if a U. S. grant covers the deficit, the hard money holdings will provide a back-up for the Chinese currency and check the raging inflation of the last two years.

To U. S. businessmen, this would mean continuation of China's present commercial buying. By far the biggest item is cotton—raw cotton and piece

goods. Trailing behind are steel and machinery, chemical, wheat, fats and oils, paper.

• **Big Difference**—In meeting the trade deficit, this country, in a sense, would be doing as much for China as it is doing for Europe under the Marshall Plan. But there's a big difference. When the Marshall Plan covers Europe's trade deficit, that's scheduled to be one phase of a broad program of self-help economic rehabilitation; for the time being, China is completely incapable of self-help.

So State Dept. intention is to go further in subsidizing Chinese development. But before that can be done, the American public must be re-sold the idea that the Kuomintang regime is worth working with. That means that Chiang Kai-shek has to come through with at least token moves that look like reform.

• **Behind the Recent Actions**—That's what's behind this month's elections of representatives to a national assembly to complete the adoption of a constitution. That's why the Nationalist government included two other political parties though minor ones. And it explains why Chiang last week established special financial and currency control bureaus—a sort of economic martial law—in major commercial cities.

Sec. Marshall is not kidding himself about the genuineness of these reforms. He's had no illusions about Chinese politics since the spring of 1946. That's when his efforts to reconcile the Nationalist and Communist groups suddenly collapsed. Since then all major help has been withheld from China—which previously had received more than \$3-billion since 1941.

Marshall will be satisfied if the reforms can be made to look good. The real point is that we need China politically. With some reform for the record he can go on to the next steps:

• **Second Step**—Military aid can include further shipments of munitions in the wake of the 130-million rounds of small arms ammunition that was furnished to the Nationalists the middle of this year. It may mean turning over the huge stocks of surplus war material now in the Far East. It will probably involve a big program of military training by U. S. specialists.

The present military mission in China has less than a thousand men—the American Military Advisory group. It mostly advises and supervises; only in one air force school is it now doing any training. Hope is that an open policy of U. S. training for Chinese troops might induce Chiang to shrink his swollen army down to a smaller harder-hitting force.

• **Third Step**—Reconstruction and development, which China can't do for itself, might be financed through the

World Bank or Export-Import Bank or directly through the U. S. Treasury.

Something over a \$100-million worth of rehabilitation projects have already been discussed with the U. S. government. State Dept. wants to see the badly damaged Canton-Hankow Railway rebuilt; this road taps the Hunan rice bowl and is important for troop movements. Also high on the list is rebuilding of the Yellow River bridge, a key point on the line to Peiping. Restoration of electric power facilities in Shanghai and rehabilitation of the Tangshan coal mines in Northern China are other favored projects.

• **Harbor Project**—One of the more ambitious ideas is development of Tangku harbor in North China as a year-round deep-water port. This would give ocean commerce better access to nearby Tientsin, a staging point for war against the Communists.

A further backlog of some \$35-50-million worth of projects was developed by UNRRA and is to be kept alive next year with the help of \$5-million of money left over when UNRRA closes down this month.

• **Payoff**—As it turns out, the State Dept.'s strategy of not pushing aid to China looks as if it is paying off. The half dozen congressmen who are preoccupied with China, and Republicans generally, have seized on official silence about China as a stick to beat Administration foreign policy. They've been shouting for release of last September's dynamite-laden Wedemeyer report. Result is that even some groups dragging their feet on European aid are now committed to a Marshall Plan in the Pacific.

Big question remains, of course, whether a program can get going while there is still a real central government in China to be propped up. If the program is delayed many more months, China threatens to disintegrate into a set of provincial governments.

AUTO AGENCY LOSES OUT

The findings of a Detroit grand jury looking into black market practices in automobiles backfired with a bang last week. General Motors Corp. announced that it had ended the franchise of Hacquoil Buick Sales, Inc., Buick's second largest distributor. This profitable Detroit agency marketed thousands of new cars yearly. It was estimated in some quarters to have an annual net income in six figures.

The end of the franchise came after the grand jury charged the agency with diverting 58 new cars to used car dealers for premiums of almost \$500 apiece.

All automakers have ended scattered franchises for violation of customary practices. But the Hacquoil incident marked the first time an outlet of any such size has been involved.

Oil Demand Still Rising

Group of petroleum economists figures it will be 6% higher next year than this. To meet it, industry will have to turn out more crude every week than it has done in any single week in history

The oil industry faces just about the biggest job in its history in the next 12 months. Here's how it stacks up:

• **Over-all U. S. demand** for all petroleum products in 1948 will be almost 6% above 1947—the industry's top year so far.

• **To meet that demand** and provide for needed additions to stocks, production throughout the entire year will have to average about 600,000 bbl. a week higher than the biggest single week the industry has ever achieved.

These goals were estimated this week by 15 top oil economists, who make up the Economics Advisory Committee of the Interstate Oil Compact Commission. Among their other findings:

Imports, almost entirely crude petroleum, will rise about 10% over the 1947 level to an average of 475,000 bbl. a day. Exports, principally products, will drop about 12% to 400,000 bbl. a day. Thus, although the committee did not proclaim the fact, 1948 will mark the transition of the United States from a net exporter to a net importer of oil.

This winter will be the industry's toughest period. Total supply in the first quarter of 1948 will be 3.3% short of demand. So the industry will have to dip into its reserve stocks at the rate of 210,000 bbl. a day to make up the deficit.

The pinch will be tightest in the Midwest and the East. In both areas, transportation—or rather lack of transportation—is the basic trouble. The situation has improved a bit in the Midwest in recent months (BW—Nov. 15 '47, p. 23). But it has got worse along the Atlantic Coast, where more tankers still are needed to bring in supplies of crude and refined products. (To help relieve shortages in the Midwest, Army engineers will keep the Illinois River open all winter with icebreakers. This will permit continued operation of barges carrying coal and oil into this region.)

• **Breakdown of Demand**—Oil demand (domestic and export combined) will shape up like this, in the economists' opinion (figures in thousands of bbl. a day):

	1947	1948	% Increase
Gasoline	2,294	2,430	5.9%
Kerosene	303	325	7.3
Distillate fuel oil..	886	975	10.0
Residual fuel oil...	1,438	1,470	2.2
Others (lub. oil, etc.)	948	995	5.0
Total	5,869	6,195	5.6%

In estimating demand, the economists admittedly made allowance for "only a moderate increase" in oil burner installations. Whether their allowance is too moderate remains to be seen. Significantly, shipments of oil burners are hitting new peaks. In September, last month for which government figures are available, factories shipped a record 127,591 units.

Nor did the committee give much encouragement to industrial consumers of residual fuel oil. For it placed demand for this product at the anticipated level of supply. "Many such consumers can use coal even though they would like to use fuel oil if it were available," the committee observed.

• **Breakdown of Supply**—On the supply side, the committee drew up this picture (figures in thousands of bbl. a day):

	1947	1948	% Increase
U. S. crude output...	5,078	5,385	6.0%
Natural gasoline....	357	385	7.8
Imports	432	475	10.0
Total	5,867	6,245	6.4%

• **Refineries**—Present refinery capacity plus that scheduled for completion next year, is believed sufficient to process the crude—if it can be transported to the right places when needed. (No pipelines for this purpose, now under construction or planned, will help.) Refinery runs throughout all of 1948 must be maintained at a level well above the 1947 pace. Starting at 5,300,000 bbl. daily in the first quarter (the level reached for a short period last October before lack of crude oil forced East Coast refineries to slow down), refinery runs must climb progressively to 5,440,000 bbl. daily in the final three months of the year.

Increases in refinery and transportation capacity carry with them the need for increases in stocks; more crude must be in storage to supply the refineries, more is needed to fill pipelines and tankers in transit. And if local shortages of products—such as may develop this winter—are to be avoided next winter, more gasoline, fuel oil, and other products must be allocated to distribution channels.

• **Breakdown of Stocks**—For this reason, the economists advocate additions of 5-million bbl. of crude and 13-million bbl. of products to industry stocks during the year. This would be the picture then, on stocks at the end of 1948:

compared with the end of 1947 (figures in millions of bbl.):

	1947	1948	% Increase
Four major products			
Gasoline, kerosene, distillate, residual	217.0	229.4	5.7%
Refinable crude oil	227.0	232.5	2.4
Others	63.0	63.0	...
Total	507.0	524.9	3.5%

As might be expected, the increases in stocks will be achieved during summer months. Demand in the second and third quarters is expected to average 10,000 bbl. a day less than during the present winter months. If capacity operations can be maintained, the industry will be in much better position to meet the nation's ever-mounting oil needs by next winter.

Lumber Price Firm

Most grades now selling at postwar highs. Midsummer slump didn't last. Little chance seen for drop in 1948.

Lumber prices in the coming year will be firm to higher, most dealers believe. They see little chance of any significant reductions from today's levels.

• **Down, Then Up**—During the last nine months, the course of lumber quotations has been highly erratic. They declined sharply during spring and early summer; then they firmed, and started

to rise. Now, dealers say, they are "leveling off at the top." That means that prices for most grades are more than double final OPA ceilings, and are equal to or greater than wartime black-market levels.

Ceiling prices on lumber were abandoned in November, 1946. Prices immediately shot up—in most part representing an adjustment of official quotations to black-market levels (BW—Feb. 22 '47, p18).

• **Buyers' Market**—But then the law of supply and demand started to operate. Production, stimulated by the high price, shot up. Demand, discouraged by the high price, slumped. Result: By June it looked as though a balance had been reached (BW—Jan. 21 '47, p35). Builders were more choosy about quality. Prices leveled off, started to slip on many grades. Small, marginal mills, finding the going too tough, shut down.

But the buyers' market was short-lived. From the doldrums of midsummer, home-building increased rapidly. Lumber demand expanded; prices started to inch up.

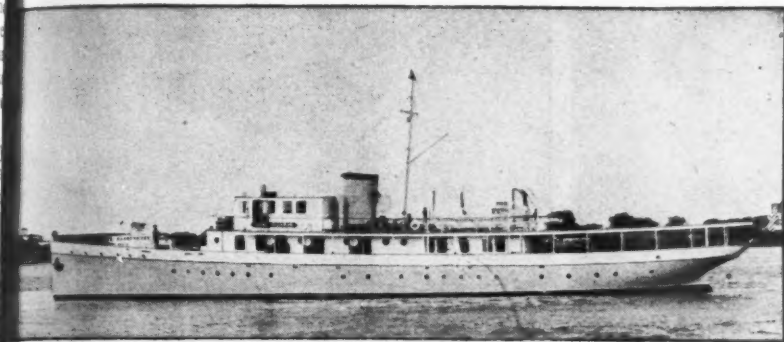
• **Samples**—A couple of examples will show what has happened. According to Engineering News-Record, the average wholesale delivered price of short-leaf yellow pine in 20 cities was \$63.42 per thousand ft. just before OPA controls went off. By May 1, it had risen to \$84.89; then it dropped to \$77.51 in midsummer. Today the average stands at \$87.09. For Douglas fir, the average for the same 20 cities under OPA was \$69.78. The spring peak was \$88.88; the summer low was \$86.38. The current quotation is \$96.74.

The situation in most higher-grade lumber has been even worse. In such items as oak, cypress, and maple, supply never did ease much, even during the early summer building slump. So when prices started to rise, quotations were little if any lower than their spring peak.

• **Outlook**—In the next few months, construction will be in a seasonal downturn. But winter also curtails sawmill activity, so little price relief is seen on that score. For the rest of 1948, practically no one expects a repetition of the building slump of early 1947. That means that demand for lumber—and hence lumber prices—will stay high.

AIR GIFT RATES CUT

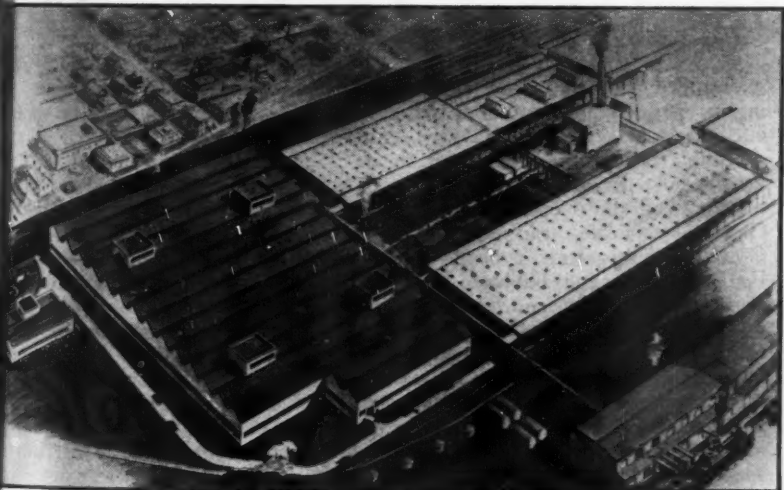
Pan American Airways last week cut air express rates on gift parcels to Europe by one-third. The new rates came just in time to catch the last-minute rush of Christmas shipments to Ireland, England, Belgium, Czechoslovakia, Germany, and Austria. They range from 67¢ to 97¢ a lb. (minimum charge: \$5.00). Maximum size for one parcel is 22 lb.



Yacht Trips Sell New Orleans, Help Bring...

Special salesman for promotion-conscious New Orleans is the yacht Good Neighbor. Bought last year by the port's Board of Commissioners, the ship is used to show

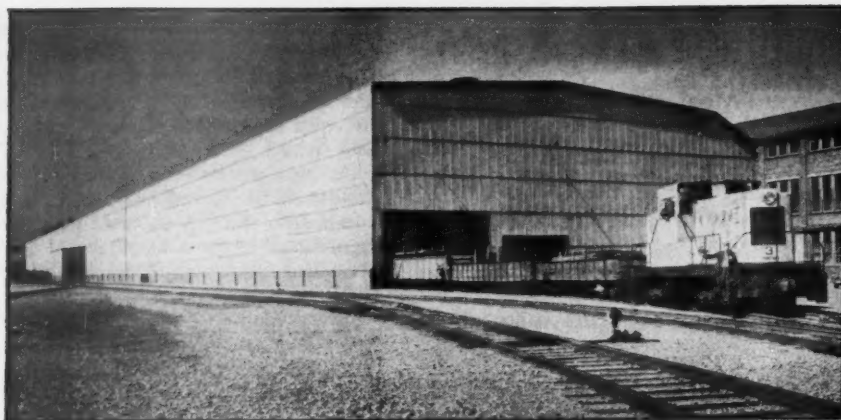
harbor facilities to visiting businessmen. Conventions in town get an invitation for a cruise. Goal: more shipping and industries for the booming port (BW—Jun. 28 '47, p38).



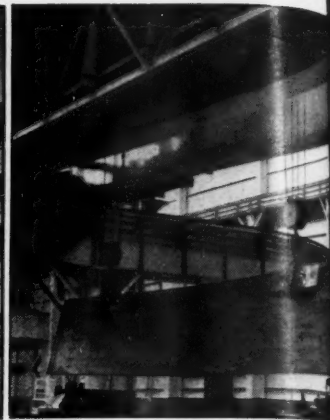
Industrial Development for the Crescent City

A twine mill (above) for International Harvester Co. and a union terminal for the city's 11 railroads are planned at New Orleans. The Harvester plant will cost \$5-million to \$8-million; work will probably

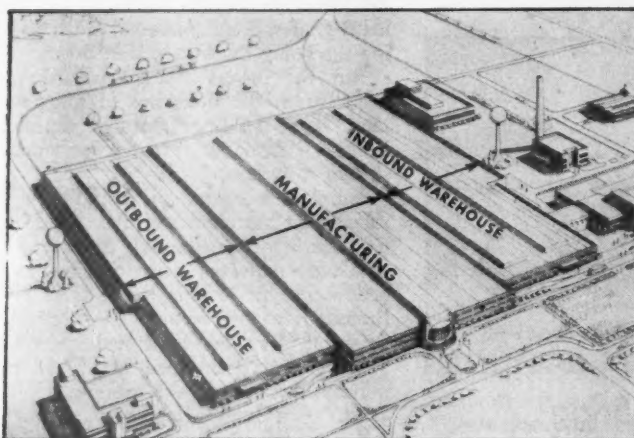
start on it in 1948. Harvester arranged with the port's Board of Commissioners to lease a 12-acre river tract for the plant. When it's completed, the company will import all its fibers for twine making through the port.



Steel Train leaves the new warehouse of U. S. Steel's National Tube Co. at Lorain, Ohio. This one-story structure provides three acres of storage space. Radiant heating is used



Mechanical handling is utilized at U. S. Supply Co.'s new St. Louis warehouse



Drugs This sketch of the Upjohn Co. plant being built near Kalamazoo shows combination of warehouses with plant



A new branch warehouse built by Upjohn at Los Angeles shows several methods of moving merchandise

Industry-Wide Trend to New Or

Manufacturers and wholesalers are shaping a new trend in warehousing. It is a visible trend toward longer and lower buildings. In them, mechanized handling is the keynote.

The new style warehouse is gaining acceptance in many fields. Among them: steel, hardware, groceries, sugar, drugs, and carpets. The new buildings are beginning to dot the landscape from coast to coast.

• **Machines and Layouts—Why?** Manufacturers and wholesalers are anxious to keep operating costs low in the face of rising warehouse labor rates. More and more of them are using machines to move goods in, around, and out of warehouses (BW—Jan. 25 '47, p38). But putting this equipment to best use calls for especially planned layouts. And the most efficient layout for the use of machines turned out to be the one-story warehouse.

During the war, the Army discovered that one-story warehouses save at least 50% in time and space. Materials can be

safely piled high. Time spent in shifting materials from floor to floor is wiped out.

• **Possible Savings—**As a result of these facts, wholesalers are keeping an interested eye on the operations of two big Chicago wholesale firms: Consolidated Grocers, giant grocery concern (BW—Feb. 23 '47, p80), and Hibbard, Spencer, Bartlett & Co., huge hardware house.

Consolidated Grocers' Sprague Warner Division (distributors of Richelieu brand foods) moved into its new one-story warehouse (pictures) last summer. Company officials feel it is too soon to make any dollar-and-cents estimate of the new setup's economies. And they point out that rises in costs, such as freight and trucking charges, have more than offset possible cash savings. But order-filling has been speeded up; handling of merchandise has been made more efficient.

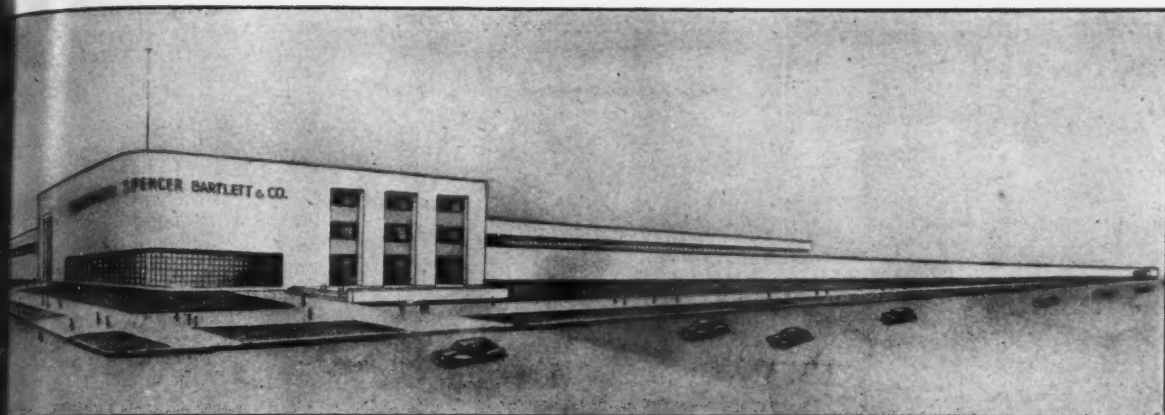
• **Inside Unloading—**One feature of the new warehouse is an inside railroad

track. Sprague Warner figures side unloading will speed up with cut heating costs.

Incoming merchandise is moved from freight cars into pallets. It is then move them either to receiving sections, or direct to assembly lines, on-order merchandise hand loaded onto four-wheel trucks.

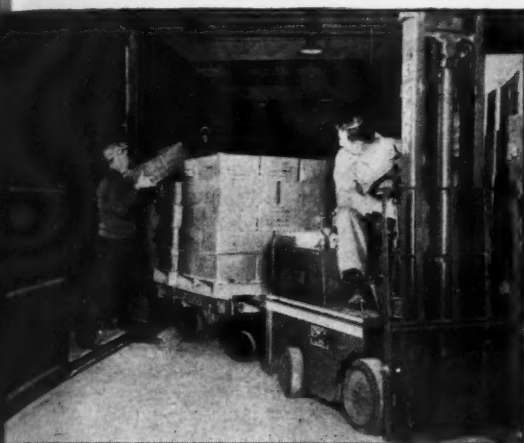
• **For Hardware—**Hibbard, Spencer, Bartlett & Co. plans to move from its old one-story building in Chicago to a new house and office in suburban Evanston by next spring. Two switch tracks running the entire length of the building will divide the warehouse into roughly into thirds. Merchandise loaded from freight cars will move on pallets to storage. A minimum of handling takes it to bins in open stock.

Wholesale hardware inventories consist of hundreds of small items. Warehouse stocks will be laid out



Architect's sketch of the Hibbard, Spencer, Bartlett & Co. office-warehouse at Evanston, Ill., which will be

ready next spring. The building will provide planned storage space for the many small items which make up wholesale hardware stocks



Pallets are used for inside unloading at Consolidated Grocers' Sprague Warner Division at Chicago



Sprague Warner achieves rapid storage of pallets in a reserve-stock section. But some merchandise goes direct to assembly line

Orory Warehouses

figures by departments. This will up training of order clerks.

Many officials estimate that direct savings from doing away with elevators will amount to over \$20,000 to reduce the cost of handling.

Rug Handling—Alexander Smith, a carpet maker, has taken a new turn. It transformed an old post office building in Cleveland into a modern showroom, and office building. The new one-story warehouse has increased its efficiency and cut handling time about 70%.

Richard Smith says that in a warehouse where rugs have to be carried from floor by elevator, much time is wasted in fitting them into the elevators. Now a few rugs can be carried on a dolly.

Hand Labor—Wherever possible, hand labor has replaced hand labor. Delivering rugs to the warehouse from trailers into one of two loading docks. These ramps are so built that

the floor level of the trailer is even with the floor level of the warehouse. Before, rugs were unloaded from the truck by hand. This usually took four men. Now, a Chicago Tramrail traveling crane operated by one man has cut unloading time about 60%.

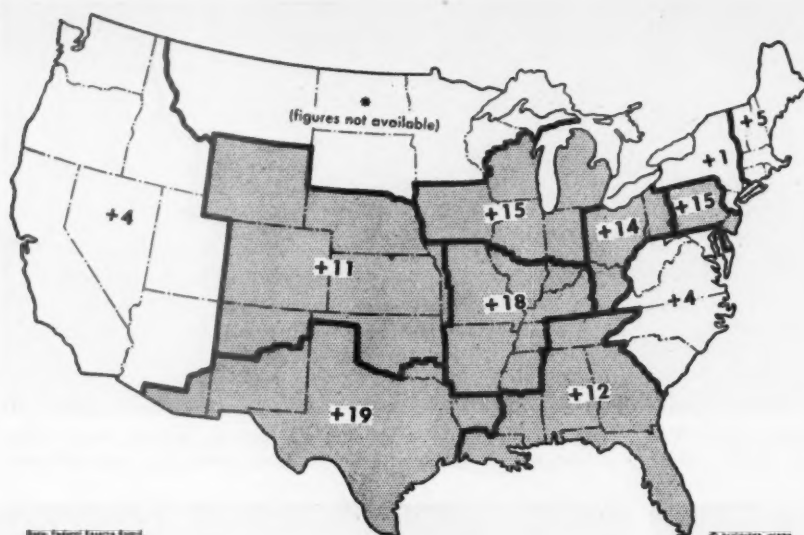
The traveling crane takes the rugs about 75 feet to racks, or stalls, where the rolled rugs are stacked. The unloading dock and storage racks take up about one-half of the warehouse. The other half is used by the cut order department, sewing room, packaging and weighing operations. Overhead tracks, dollies, and mechanical balers cut labor here to a minimum.

For Heavy Materials—U. S. Steel Supply Co., a subsidiary of U. S. Steel, has recently built a new one-story warehouse at St. Louis (picture), equipped to handle heavy materials. The warehouse has five aisles, one running across the other four. They will speed up zoning and loading of steel for shipment.

Steel arriving on the plant railroad siding will be stored, processed, and handled in the aisles, and will be loaded on delivery trucks on the opposite side. Two other warehouses, similar in design and equipment, have been built by U. S. Steel Supply at Cleveland and Los Angeles.

Progressive Flow—The Upjohn Co., pharmaceutical manufacturer, is using this "horizontal-movement" plan in its new plant (picture) under construction near Kalamazoo. Upjohn wants to provide progressive flow of materials and allow for expansion of warehouse space in proportion to increase in manufacturing space.

So the main building of the new Upjohn plant will include, under one roof, the main manufacturing area flanked on one side by the "inbound" (raw materials) warehouse, and on the other side by the "outbound" (finished goods) warehouse. Each of these warehouses has 800 feet of inside railroad track and a truck dock.



SHADED AREAS show regions where department stores are doing best. Their Thanksgiving week sales showed better than the national average gain of 10% over a year ago

Xmas Sales Hitting New High

That's the story so far. Department stores report Christmas business runs well ahead of 1946—previous record year. Mail-order houses mark up big gains. Small stores doing well, too.

The nation's retailers are pushing hard for a new record Xmas business this year. At the halfway mark between Thanksgiving and Christmas, it looks as if they are going to make it easily.

DEPARTMENT STORE SALES in the week of Thanksgiving were running 10% ahead of a year ago. This week it was becoming apparent that the holiday trade will ride through at that level.

MAIL-ORDER HOUSES are cashing in on an unusually large Christmas-selling promotion job. And they got a jump on competing retailers by buying holiday goods early.

MANY SMALLER STORES are capturing more than their usual share of Yule business. Small chains—especially in the variety, auto accessory, and grocery fields—are doing well.

The 1947 volume of Christmas sales would be a surprise only if it failed to surpass last year's record. After all, the national income is at the highest level in history. Even after taxes, there is plenty of money left to spend.

• **Competition**—Big department stores and specialty shops believe holiday business would run even higher this year, had food prices stayed down. They figure that total retail grocery sales are running some 25% over last year. So the average consumer has to pay more attention to her food budget and has to watch what she spends elsewhere.

This careful spending results in more

shopping before the customer buys. Retailers say they see signs of that. High prices do not necessarily stop sales, but they do encourage a demand for better-quality merchandise.

• **Bargains?**—Big sales advertised heavily in some cities have brought out the crowds. But attempts to unload old, inferior merchandise resulted in a lot of consumer criticism. Sometimes it led to a real slowdown in sales.

Shoppers who wait until the last minute hoping for cut-rate bargains may be disappointed this year. They count on department stores holding pre-Christmas sales to avoid carrying goods into January markdowns. But department store people believe present heavy buying and relatively low inventories of wanted merchandise will make such sales unnecessary.

• **New York Lags**—With sales running nip and tuck with last year in New York, department store advertising is heavy. New York newspapers carried 17% more ads for department stores this November than in November, 1946. The December advertising volume is holding that lead.

But New York quality stores act like they aren't worried very much. They're not staying open nights during the pre-Christmas period. One of them, Lord & Taylor, reported that sales last Saturday were the biggest in store history—10% ahead of the corresponding Saturday a year ago. Macy's clocked sales one day

last week at \$1,481,072, highest in history.

• **Other Cities Report**—Chicago saw a surprise when sales boomed despite curtailed advertising. A printers' strike on the local newspapers (BW-D '47,p114) first reduced the size of papers. When the papers returned full size, printed by offset, they carried fewer ads. Retail ads had to be sent to commercial printing plants. This cut down the chances for making last-minute changes. In spite of these handicaps, Chicago store executives report they are running 5% to 10% ahead of a year ago.

In Detroit, retail sales began to set a record size right after Thanksgiving. Department stores and police officials reported the heaviest downtown traffic in history. Store spokesmen said sales were 15% to 25% above 1946. The early December snowstorm was credited with having a good psychological effect on shoppers.

In Cincinnati, store sales took an upward turn during Thanksgiving week. Traffic actually blocked downtown streets for hours on big shopping days. • **Farmers Spend Heavily**—Although regions of the country shared in the Christmas trade, the brightest spots were in the Middle West and South. Department stores in those areas were racking up the largest gains in the nation. A lot of the spending was being done by farmers.

The fat farm market was being exploited heavily, too, by the mail-order houses. While department and specialty stores last spring were hanging back buying Xmas stock, the mail-order houses placed orders. As they came into fall and early winter selling season, the catalogs went out filled with Christmas bargains.

• **Record**—Sales of mail-order companies zoomed. Sears, Roebuck & Co. showed the biggest November in its history. Sales were over \$226-million, up 25% from last year. Montgomery Ward's November business was up 21½%.

Small town merchants are reporting doing well, too. Their newspaper advertising is heavier this year. They have good-sized stocks. They, too, are looking forward to a Merry Christmas.

PUBLICITY IS PUBLICITY

Publicity has long been a city road problem. One newspaper, the *Demo Post*, has done something about it.

The *Post* plunked all its handouts on one page under a three-column headline in 60-pt. type which boldly labeled it "Publicity Page." The project, however, is no "open sesame" for the release of high-powered press agents. Instead it is to get the publicity chairman of local civic groups and women's fraternal orders out of the city editor's hair.



KEY PEOPLE" - When You Need Steel

Ryerson's function is not only to supply your steel, but to deliver it on time. From the moment the Ryerson switch-board flashes your incoming call until the steel is laid down in your plant, a corps of helpful, intelligent employees well-trained in the Ryerson "Immediate Steel" tradition are at your service.

The likeable young women at the switch-board, phone-order salesmen, dispatchers, crane operators, skilled warehousemen who cut, shear and shape stock to sizes to fit your specification, truck drivers—all of them are key people at Ryerson—key people in your service, when you need steel!

In spite of shortages, we are putting forth every effort to serve all Industry to the best of our ability. Naturally, many sizes and certain products are out of stock. However, for the most part you can depend on Ryerson for immediate shipment of a wide range of steel products.

PRINCIPAL PRODUCTS

Bars—hot and Cold rolled alloy steel reinforcing	Mechanical Tubing	Tool Steel
Structurals	Boiler Tubes and Fittings	Wire, Chain
Plates—Inland 4-Way Floor Plate	Allegheny Stainless—sheets, plates, shapes, bars, tubing, etc.	Bolts, Rivets
	Sheets and Strip Steel	Babbitt
		Metal Working Tools & Machinery, etc.

JOSEPH T. RYERSON & SON, INC., Plants: New York, Boston, Philadelphia, Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee, St. Louis, Los Angeles

RYERSON STEEL



"A credit report from Binghamton...in an hour's time!"

THERE was a desperate gleam in the New York sales manager's eyes. "We just got a big order from a new firm in Binghamton. Never heard of them before—and we have to know before five whether we can deliver on their terms!"

"Calm down," said the credit manager reassuringly. "There's a Marine Midland bank in Binghamton. And Marine Midland officers know the businesses in their community. Let me put a call through to them."

In a few minutes the credit manager was explaining his problem to a Marine Midland officer. And in less than an hour, the banker had phoned back the information that gave the green light for establishing a profitable relationship with the new customer.

The 19 Marine Midland Banks, with 98 offices in 47 New York State communities, stand ready to assist you in your credit problems. Ask Marine Midland!

**The
MARINE MIDLAND
TRUST COMPANY
of New York**

120 Broadway

Member Federal Deposit Insurance Corporation

COMMODITIES

Paper Supplies Catch Up

Over-all outlook is brighter. By next spring supply expected to be level with demand in most grades except newsprint. High-profit stuff already in good supply; low-profit grades scarce.

By next spring supplies of paper and paper products should catch up with the record demand. Already, a good many of the higher-profit specialty products are plentiful.

There's one big exception. Demand for newsprint will continue about 5% higher than supply, providing there's no disturbance of the present favorable import-export ratio.

• **The Long and Short**—As of this week, paper makers find they have fewer products on the short side, more than are balancing off with demand.

STILL FAIRLY SCARCE are such items: toilet paper, grocery bags, butcher wrapping paper, glassine and greaseproof papers, wrapping tissue, book paper, sulphite bond, and kraft wrapping paper.

ON THE PLENTIFUL SIDE are: paper towels, facial tissue, rag papers. In general, these are the high-profit-margin counterparts of the low-profit items which are still comparatively short.

• **No Self-Rationing**—The over-all supply picture varies from one part of



Sober Words on Curbing Exchanges

Grain men last week aimed their heaviest artillery at the Administration. J. O. McClintock (right), president, Chicago Board of Trade, went to Washington to lead the battle against the government's "anti-inflation" proposal for higher margins on the grain exchanges.

Former Rep. Roger C. Slaughter (left), the exchanges' special counsel, directed the

defense before the Joint Congressional Economic Committee. Grain men denied the speculative trading was inflationary. They insisted that higher margins would have a long-run effect on prices.

History added weight to their words: The last time margins were raised (BW-Oct '47, p26) prices kept on going up—the volume of trade fell off.

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You always get
a **GOOD STEER**
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get this advice:

*Build it of
BRASS!*

Exemplary conduct in line of duty is expected of every instrument in the wheelhouse of every craft afloat. So there, on duty, you find bright Brass in gyro-compasses, binnacles, sextants, revolution indicators, and other navigating equipment. For Brass carries "master's papers" for each of these jobs. Non-magnetic and ruggedly resistant to corrosion, Brass was an ancient mariner in Columbus' caravels — and is shipshape and modern today in sleek new luxury liners.

Matter of fact, Brass is *always modern* — for in these jobs, like many others — no satisfactory substitute has ever been found for this yellow alloy of a thousand uses.

And if you want new dependability, new fabricating economy, and new merchandising power in *your* product, then *build it of Brass* — or build Brass into it at vital points. Then, while you're at it, build it "Bristol-fashion" (an ancient and honorable seaman's term meaning trim, clean, prompt, *right*). Build it of Brass sheet, rod, and wire rolled and drawn in the modern mills here at Bristol. Our Sales Engineers will fit their time to yours, to measure the possibilities of greater profits for you through the use of Bristol Brass. Write.

The **BRISTOL BRASS** *Corporation*
Makers of Brass since 1850, Bristol, Connecticut

NEW YORK OFFICE: 13 PARK ROW, NEW YORK CITY
PITTSBURGH OFFICE: 438 OLIVER BUILDING, PITTSBURGH, PA.
ROCHESTER OFFICE: 616 TEMPLE BUILDING, ROCHESTER, N. Y.
PROVIDENCE OFFICE: 827 HOSPITAL TRUST BLDG., PROVIDENCE, R. I.

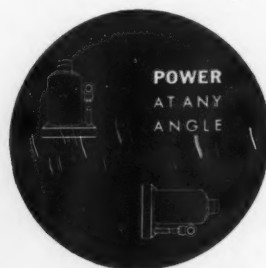


HEIN-WERNER HYDRAULIC JACKS PROVIDE

Hydraulic Power UP TO 100 TONS

Industrial plants have found many time and labor-saving uses for Hein-Werner Hydraulic Jacks. For maintenance work, reconversion work or production line operations, these hydraulic jacks are great for pressing gears, pinions or bushings—or for helping shift heavy machinery, move heavy stock, or other load-lifting operations up to 100 tons. Every Hein-Werner Jack is tested at $1\frac{1}{2}$ times its rated capacity.

Let an H-W Hydraulic Jack prove its ability to handle any number of tough jobs in your plant. Once you've tried one you'll order more. Made in models of $1\frac{1}{2}$, 3, 5, 8, 12, 20, 30, 50 and 100 tons capacity. See your industrial supply distributor or write us.



Hein-Werner
HYDRAULIC JACKS

HEIN-WERNER CORPORATION • Waukesha, Wis.

nation to the other. Many paper mills are selling close to home rather than shipping to some more distant market they would normally try to reach.

Paper manufacturers are quite certain of one thing: Marshall Plan demand will bring no rationing or price controls over their products—not even newsprint. The industry is too close to a flip-side of the supply-demand balance that will bring back the old-time price competition. Prices generally are due to hold the line, but some have started down.

• **Catching Up**—The prospect of supply-demand balance stems from: (1) improved supplies of wood, pulp, and other raw materials; (2) gradual stepping up of pulp and paper capacity; (3) and the slow reloading of the industry's complex supply lines. Over-all demand for paper goes up and down with the level of general business activity. With business plowing ahead, the paper industry's job has been to catch up. Now, it's just about caught.

The sign of improved raw material supply is higher pulpwood inventories over a year ago. The Lake states are ahead only about 1% on inventories. Elsewhere, pulpwood supplies in the wooded yards of pulp and paper mills are up from 5% in the Appalachian area to a fat 105% in the Pacific Northwest. Woodpulp inventories are also up, with paper superabundant, bags plentiful.

Imports of pulp to the U. S. have also helped boost domestic paper production. Market pulp (that not already contracted for) received from Canada during the third quarter of 1947 was up an estimated 22% over a year ago.

• **Shortages**—Despite the steady gain in supplies of wood and pulp, most paper manufacturers are still allocating products to customers (except the high-profit items already noted).

Kraft wrapping paper is scarce in all sections of the country. Paper dealers are screaming about "bogus" kraft. It is plentiful—but it's about 50% waste paper, the rest being the real kraft pulp. And the prices are much too high, the dealers howl.

Total production of coarse papers is up 5%. But glassine is down almost 15%, and wrapping paper was off about 2% during June-September from a year ago. On the other hand, special bag paper output is up 18%.

• **Writing Papers**—In fine grades, rag content bond and other specialty papers are plentiful. But sulphite bond and mimeograph paper are still relatively short.

Paperboard production is about up to demand, according to Dept. of Commerce reports from the field. Box and fiberboard manufacturers report a dropping off of their unfilled orders for most kinds of boxes and boxboard.

• **Newsprint**—Consumption of newsprint was up 14% in the first three

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Dairyman's Luck

Yes, luck for dairymen—and for farmers, poultrymen, paint manufacturers, pharmaceutical companies and for a host of other industries, as well.

For now when fishermen bring in a big catch of sardines, herring or menhaden, a revolutionary new refining process developed by Kellogg makes it possible to extract from these fish body oils, at low cost, huge quantities of vitamins A and D valuable in fortifying livestock and poultry feeds—as well as a high yield of superior quick-drying oils needed in the

manufacture of paints, linoleum and other products.

Through the Solexol* Process, industry now has an efficient, commercially practical method for separating, refining and concentrating various fractions in non-mineral oils according to molecular weight and structure—opening the way to new economies, new products and new industrial progress in the processing of a wide range of marine, vegetable and animal oils including fats and tallows.

For full information, including production economics, write:

Glyceride Processes Division, The M. W. Kellogg Co., 225 Broadway, New York 7, New York.

SOLEXOL

Decolorizes, separates, extracts, concentrates and deodorizes

VEGETABLE OILS

Soybean Peanut Cottonseed
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Tallows Waxes Greases

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Fish body oils and liver oils having widely different physical, chemical and vitamin-potency characteristics.

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Engineers and Economists to International Industry

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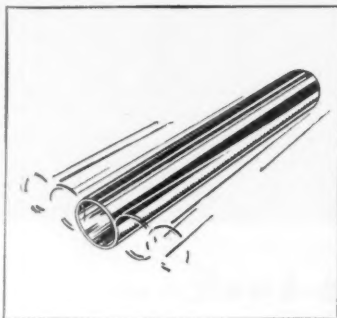


BUSINESS IN MOTION

To our Colleagues in American Business ...

There is so much emphasis on science today that there seems to be a tendency to forget the importance of the good old method of trial and error applied to the solutions of problems. After all, practical men in all kinds of businesses have a great deal of knowledge, and quite often intelligent experimentation based upon experience will produce the desired results. But there are at least two occasions on which the wise practical man turns to science. One is when time, money and materials are lacking for experiments, and the other is when the best rule-of-thumb methods have failed.

A recent case involving condenser tubes illustrates the great value of collaboration between science and industry when industry is really baffled. There was a certain condenser in which tubes were failing much too quickly. Everything that an unusually skillful and competent plant superintendent could think of was tried, without result. Finally, samples cut from failed tubes were sent to the Revere Research Laboratory. There, chemical and microscopic investigations showed that while failure was due to corrosion, there was another factor, vibration. It is known today that vibration in a condenser produces cracks across the grains of the metal, not only weakening it but also affording more points for corrosive fluids to attack. Vibration also disturbs or disrupts the thin film on the surface of the metal that protects it and helps reduce the rate of corrosion. Of course



vibration is but one of many factors that can affect the length of service of condenser tubes, but in this case it was evident that it was the most important, being responsible for the greatly accelerated rate of corrosion.

Putting the palm of the hand on that condenser, the good old method of testing for vibration, proved nothing, because nothing could be felt. It took a well-equipped laboratory many miles distant to discover that the tubes in that condenser vibrated. That the diagnosis was correct was proved by the fact that after changes were made to reduce the vibration that only the tubes could feel, tube life became normal.

Revere is always glad to do work of this kind. It is part of our obligation to customers and indeed to industry as a whole, since our collaboration is offered to all users of non-ferrous metals. This policy is by no means unique with us. Pro-

ducers of materials in every industry maintain laboratories and staff them with scientists, technicians and engineers. No matter what kind of materials or machines you buy, remember that the manufacturers of them will take a lively and skilled interest in any problems encountered in their use. I suggest that you need not and indeed should not hesitate to seek scientific help from your industry's suppliers, because they know so much about their materials and are as interested as you are in seeing that they are correctly used and give satisfactory, economical results.

REVERE COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

★ ★ ★

Executive Offices:

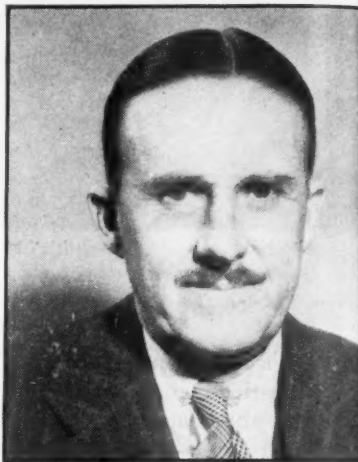
230 Park Avenue, New York 17, N. Y.

quarters of this year over last. Canadian production was up 8% during this period; U. S. production rose 6%.

Open market prices on new sprout are reported to be tapering off—that is, tapering off from a peak of about \$250 a ton down to around \$200.



Samuel Mairs



T. L. Daniels

VETERANS FOR TOP POSTS

Samuel Mairs has been named chairman of the board of Archer-Daniels-Midland Co. and T. L. Daniels, president. Both were executive vice-presidents. The positions were held previously by Shreve M. Archer who died Nov. 10. Mairs, who joined the predecessor company (Archer-Daniels Linseed Co.) in 1903, became secretary of the present firm in 1923; executive vice-president in 1933. Daniels, son of the president of the original company, served as a foreign service officer in the State Dept. for eight years, rejoined the company in 1920. Davis served on the War Production Board and the War Food Administration during World War II, returned to A.D.M. in 1945. Archer-Daniels-Midland is one of the world's largest linseed oil processors.

History-making power stations

No. 9 Oak Ridge Station

CLINTON NATIONAL LABORATORIES
OAK RIDGE, TENN.



OAK RIDGE! No need to cite pioneering achievements or record performance to call this power station history-making. As the source of most of the power required to produce the atom bomb, it shares the fame of the product.

But on its own, the Oak Ridge Power Station is a big story. Take its boilers, for example. There are three of them, each as high as a twelve-story building and each capable of producing more than three quarters of a million pounds of steam per hour at a pressure of 1400 pounds per square inch. At full capacity, they consume about three carloads of pulverized coal every hour. Their construction required the use of sixty-five hundred tons of steel, which in-

cluded the equivalent of 200 miles of alloy and steel tubing. These boilers rank among the largest and most efficient in the world.

Such an installation normally requires more than two years for design, fabrication and erection. But under war conditions, where the impossible was done promptly and the miraculous took but little longer, Combustion Engineering designed, built and erected these boilers in one-half the normal time.

For this and other contributions to atomic bomb production, Combustion Engineering was one of the companies that was given the Seventh Biennial Award for Chemical Engineering Achievement.

The association of C-E with Oak

Ridge and many other power stations that have made history speaks for itself. The experience, special skills and advanced engineering that have brought about this association are available to you, whether your steam requirements be large or small.



These three factors are the unwritten plus-values in every C-E contract -

Knowledge - to solve today's, and tomorrow's, steam generating problems.

Experience - to interpret, from a world-wide background in every important industry, the specific needs of each installation.

Facilities - to manufacture complete steam generating units for every capacity, from 1000 pounds of steam per hour up to the largest. B-188

COMBUSTION ENGINEERING

200 MADISON AVENUE • NEW YORK 16, N. Y.

Typical "HEADACHE" Job



—until this Detroit paint manufacturer solved it with a **ROSS** Lift Truck

Moving and storing 800-pound drums of paint may not be spectacular work. But handling them in quantity was a back-breaking, space-wasting job that caused a lot of headaches before Rinshed-Mason Company put this **ROSS LIFT TRUCK** to work. It's typical of the many handling jobs which almost every plant has to contend with—jobs which a **ROSS** with its all-weather, all-surface performance will handle a lot better and a lot faster.

A survey of almost any plant will show up many places where hundreds of man-hours could be saved for productive work through the use of **ROSS Heavy Duty LIFT TRUCKS**. Six models, capacities 5,000 to 18,000 pounds. Hydraulic hoist, gasoline power, pneumatic tires.



THE ROSS CARRIER CO.

300 MILLER STREET, BENTON HARBOR, MICHIGAN, U.S.A.
Direct Factory Branches and Distributors Throughout the World

Woolens Pick Up

Costs stay high and may go higher; but demand keeps pace. Worsteds so scarce mills will keep up allotments after Jan. 1.

End of the rise in the cost of wool and worsted fabrics is not in sight. New England manufacturers expect the goods (which go into men's and women's suits and coatings) for next fall wear will be up 10% to 15% from present levels.

That's a long look ahead. But it is based on labor and materials costs that show no signs of going down and a higher buyer demand.

• **Twice Prewar**—By the end of 1947 U. S. consumers will have bought nearly 6 lb. of woolen-worsted fabrics each. That will be more than double the pre-war consumption. It traces to more people being able to buy more clothing. The heavy buying accounts for the shortage of suits, coats, topcoatings, and worsted dress goods, despite high pressure production by mills all this year. It has caused the mills to ration cloth to their garment-making customers. Allotments will still be in force after Jan. 1, when the cloth makers shift over from this year's fall and winter lines to spring goods for 1948.

Late last winter woolen goods demand slacked off. Consumers quit buying the sleazy materials which had shown up in sports coats for men and coatings for women all through the war.

Retailers shut off orders. Some woolen mills in New England were forced to close (BW—Mar. 22 '47, p. 22).

• **Quality**—It's a different story now. Early in the present fall-goods season, woolen mills began to come back into production; but they felt their work. Quality was demanded, so quality fabrics were made—although the price was actually higher. Nevertheless the cloth caught on, and moved fairly well.

As the season progressed, consumer demand for all types of garments picked up. Woolens did consistently better. One reason was that worsteds were scarce.

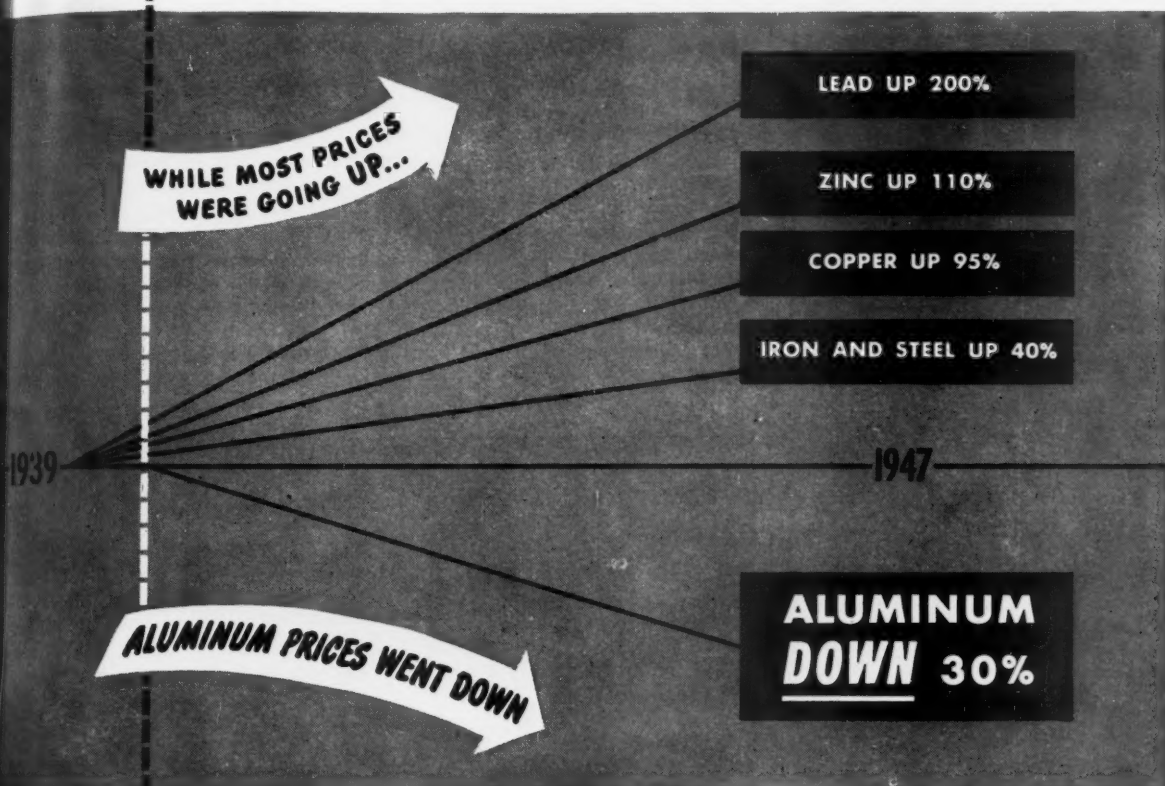
• **Supporting Factors**—Shoring up the argument for higher goods prices next year are these factors:

(1) Further wage increases are likely when present contracts expire next spring.

(2) Garment makers recently got a pay increase.

(3) Wool prices continue to rise with fine domestic grades scarce. Australian wools range in price 25% to 60% above June closing prices. The U. S. uses 60% to 70%, normally, of Australian wools.

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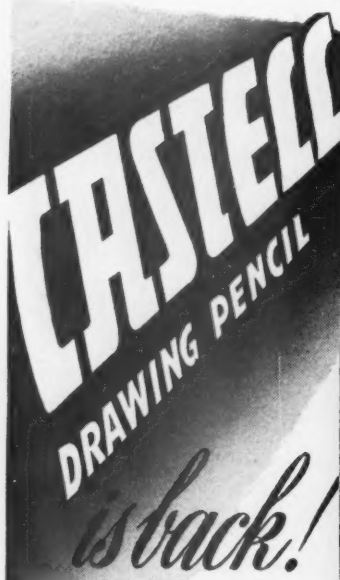
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STEEL

No Shortage of Alloy Steel

Survey finds that supply—unlike that of carbon steel—is more than adequate to meet industry's demands; no delay in deliveries; experiments uncovering new stainless uses.

The short supply of carbon steel is expected to continue next year. But there will be plenty of its more expensive, specialized running mate—alloy steel. A check of the field this week showed that most alloy steelmakers are out looking for business.

• **Why Plentiful**—Reasons for the plentiful supply:

(1) Melting capacity has been increased tenfold since prewar.

(2) Alloy-making "know-how" has been greatly increased by new manufacturers having been drawn into the field during the war.

(3) The plentiful supply of scrap, due mainly to the scrapping of war surplus equipment.

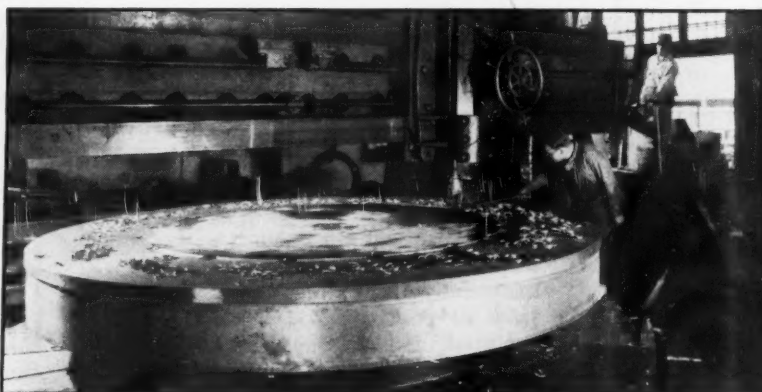
• **Production Up**—New uses have increased the production of alloy steel twofold since prewar.

Of the various alloys, stainless steel



From Mighty, Red-Hot Steel Ingots . . .

Fresh from Bethlehem Steel's furnace comes a glowing 460,000-lb. steel ingot. It forms the magnet plates for the 2,500-ton "Synchro-Cyclotron" just installed at Columbia University's new nuclear physics research center at Nevis, Irvington-on-Hudson, New York.



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showed the greatest increase. Production of ingots in 1939 was only 179,000 tons, against 550,000 tons produced in 1946.

Because of the difference in price, alloy steel is not expected to come into general use as a substitute for scarce carbon steel. Its use will continue to be restricted to specialized purposes.

Supply and Demand—Here is how supply and demand of alloy steel shapes

Stainless steel bars—Demand at about level of prewar, not expected to rise appreciably. Supply plentiful, normal delivery (four to five weeks).

Stainless plates—Demand on increase but supply still adequate. Normal delivery.

Stainless sheet and strip—Demand highest here and all capacity engaged in production. Bottleneck at finishing stage because of need for equipment to finish carbon steel. Backlogs expected to fall slowly, but orders can be filled in a few weeks.

Alloy tool steel—Demand fell sharply end of war and despite a comeback still below an arbitrary normal. Supply adequate. Normal delivery.

High-temperature alloy steels: Demand increasing and showing signs of a permanent upward trend. Adequate supply. Normal delivery.

New Uses—Although demand is expected to underpace supply in 1948, manufacturers are sure that they will continue to find new uses for alloy steels. Already in wide use in the automotive field for gears, bearings, and highly stressed parts, alloy steel (sheet) finding new outlets in railroad freight cars and auto truck bodies.

Many new uses also are being found for stainless steel. Already in wide use, stainless steel is being experimented with in (1) the brewing industry as a replacement for copper, in (2) the building industry as a replacement for curtain walls between floors in multi-story buildings, and as (3) nails where noncorrosive results are a requirement.

NICKEL PRICE CUT

One commodity price is going down. International Nickel Co., Inc., has just announced that it will knock a pound off the U.S. price of refined nickel, effective Jan. 1. This reflects the 50% reduction in the U.S. import duty on nickel negotiated at the Geneva conference (BW—Nov.22'47, p.3).

The cut will bring the price of nickel down to 33½¢ a pound. The price to small consumers has been 35¢ for years. Until late in 1946 large contract customers could get nickel for 31½¢, but for the past year they've been paying 34¢ too.

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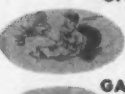
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WATERWAYS and RAIL



FEDERAL TOWBOAT, in typical old-style cluster, pushes a load for Uncle Sam

Barge Lines Profit-Bound

Government-operated Inland Waterways Corp. out of red for first time in eight years as result of new management, \$2.6-million investment. Result: Private companies may take it over.

For eight years the government-owned Inland Waterways Corp. (known as the Federal Barge Line) has lain financially stagnant. But now, for the second time in two decades, it appears to be flowing out of the red and into the black. Responsible are two things: (1) a new administration; and (2) \$2.6-million of federal money.

• **Brighter Future**—Last week it looked as though all this might result in a brighter future for the barge lines than they had in their 30-year history. For a group of leading businessmen from communities along the waterways had become highly interested in the barge lines. Its aim: to take the lines out of government operation and put them into private hands. The group met with the Under-Secretary of Commerce, William C. Foster, in Washington this week to present its case.

The government water carrier service was originally established in 1918. It was first operated by the Railroad Administration, then by the War Dept. from 1920 to 1924, when the Inland Waterways Corp. was created by Congress.

Between 1918 and 1924 the service lost more than \$4-million; from 1924 until 1938 it made a modest profit. Then the bottom fell out. Reason: The money-making wheat trade, brought back to life by war-born European demand, was pulled out of Mississippi and tributary river barges for faster service. And when the U. S. entered the war, more freight moved to the railroads. Only by pouring millions of dollars a year into the barge lines did the government keep them going.

• **New Pilot**—In mid-1946, the Commerce Dept. hired A. C. Ingersoll, a veteran bargeman, pilot, and son of a well-known barge line executive. His job: to scrape the financial barnacles off the barges and get the company into some semblance of order. The object: to ready the property for sale to private industry.

Capt. Ingersoll dug into the problem and in short order the deadwood began to fly. When the dust settled, the line's personnel had been whittled to about two-thirds previous strength—with a loss in output. Next in order was a thorough airing of union feather bed-

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ding, which had hit a new high. *Finnell* came an overhaul—now in full swing of the line's decrepit equipment.

• **Two Alternatives**—Early this year Commerce put its barge line problem before a subcommittee of the House Appropriations Committee. The corporation pointed out that two alternatives faced the government with regard to the "down at the keels" lines: modernize them (cost \$17-million); sell them to private industry.

The modernization plans include such things as a streamlined "integrated tow" (a single rigid column of barges in front of a power unit, rather than the customary bulky cluster of barges). After hearing them, Congress gave Commerce \$2.6-million as a start toward whipping the barge lines into shape. It said to forget selling until the lines were leading the field again; the 1924 Inland Waterways Act is amended.

• **Results**—Now, after a year under Capt. Ingersoll, the lines are on the way out of the red. Commerce Dept. officials predict that profitable operations should become a reality in the 1949 fiscal year (beginning next July).

The rehabilitation program is showing results. Six of the most decrepit tow boats in the fleet of 26 will have been completely overhauled and modernized by the end of the year. Terminal operations are in progress of overhaul and municipalities are being encouraged to take them over. Worthwhile savings have been made all along the line.

• **Tonnage Jump**—The 40% jump in tonnages in recent months is due largely to a sudden resumption of packaged freight shipments. They had disappeared during and immediately after the war when inventories were near bottom levels. Only when inventories are in good shape can shippers afford to load their merchandise on cheap but slow barges without worrying about delivery dates.

Two other significant trends are:

(1) Loading of bulk raw materials—such as bauxite, chemicals, fluorspar, sulphur, industrial alcohol, petroleum and coal—has started up again; and

(2) An increase of heavy shipments of autos, trucks, salt, sugar, coffee, and other nonperishable foods.

• **Grain**—But the brightest outlook is that eventually grain will return to the waterway trade at peacetime volume. That is nullifying some of the barge worries over the tremendous rise in handling costs for packaged goods at terminals.

In the short time he has piloted the Federal Barge Lines, Ingersoll has pioneered several new trade routes leading off the main Mississippi channel. Government barges already have gone as far upriver as Yankton, S. D., and then

plans for pushing to the very foot-
hills of the Rockies. Great Plains busi-
nessmen are showing interest, and have
asked for more of the same on other
rivers in the Mississippi chain.

Transport Giant?—The privately
owned barge lines are watching Inger-
oll and the Federal Barge Lines with
keen interest. They see the groundwork
being laid for what promises to become
a transport giant—one that they feel
will really give the railroads a run for
their money.

Car Pinch Eases

Peak demand passes as
crops come in, outdoor building
shuts down in North, West. End
of Lakes season will also help.

Railroad car shortages, for both gen-
eral commodities and coal, are easing—
as rail men expected (BW—Oct. 18 '47,
19). Boxcar demand has hit its peak
and has eased off to a plateau.

Coal cars, critically short until the
last few weeks, are showing up in in-
creasing numbers at points where they
are most needed. The crisis came—and
was overcome—the week of Oct. 25.
That week there were 40,844 too few
open-top cars for hauling newly mined
coal. By Nov. 22 the shortage had
dropped to 28,231. That week 13.3-mil-
lion tons of coal were loaded and
shipped to consumers. This was the
highest loading since June 7, when
13,430,000 tons were loaded.

• **Cars Released**—The close of the Great
Lakes shipping season this week re-

leases the bank of 10,000 cars held
there. They will go back to the coal
mines, for traffic to inland points. More
cars are coming in from the West and
North, where outdoor construction is
slacking off and where harvests have
been hauled.

From now on out, barring unfore-
seen transport halts (bad blizzards or
strikes) coal cars will be plentiful
enough to carry the demand. Experts
have figured that the railroads must
haul 12.5-million tons a week to meet
demand. All over that should be gravy.

• **"Cushion"**—Actually, there is a 400,-
000-ton "cushion" available in case any
spot shortages are caused by interrupted
shipments. This grows out of a "pretty
accurate" estimate that for the next
couple of months the roads will actually
be carrying 12.9-million tons a week.

Of course there are two unknown
quantities in the demand situation.
One is the effect a serious oil shortage
will have on coal demand, and the
other is the possibility that the State
Dept. will increase the export tonnage
of coal to Europe. The second possibil-
ity is not in the cards yet. Last week the
French eased the situation even more
by canceling the rest of their December
imports of U.S. coal.

• **Example**—The oil shortage in New
England already indicates what could
happen to demand for coal. People
there have snapped up stories that oil
deliveries would be tight. Result: The
demand there for anthracite, 20% over
last year's average.

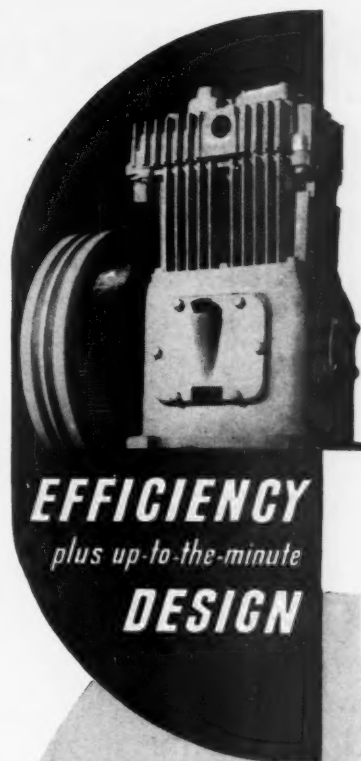
But bright as the coal car situation
is now, the railroads could not stand a
20% jump in demand—not even with
government controls. "There just ain't
that many coal cars," one official said.



Longer Cars Mean Bigger Loads

New extra-long boxcars from the Pennsyl-
vania R.R. are helping to ease the rail car
pinch. The cars sport special markings, roll
the rails carrying overnight shipments of
less-than-carlot freight between specific

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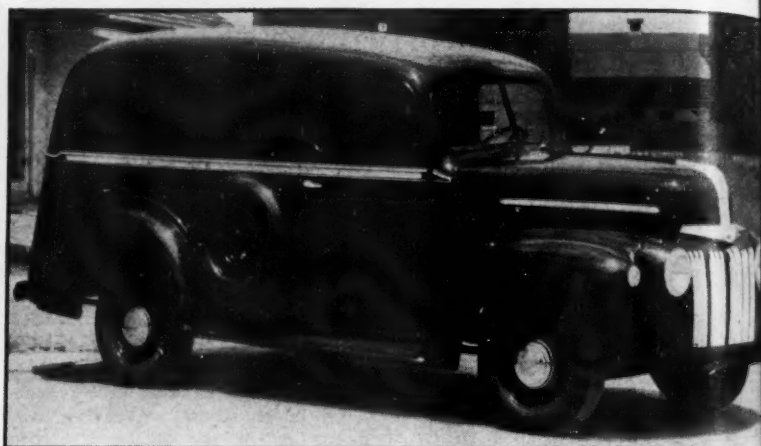
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PANEL TRUCKS are still scarce; buyers scramble for them

Light Truck Demand Intense

Manufacturers can't see end to backlog of orders. Output still far below demand. Holdup is sheet steel, also needed for passenger cars; makers waiting for shortage to ease.

Business Week has been surveying the truck field for the past few weeks to get a complete sales-production picture of that industry. Results are being presented in a series of three articles, of which this is the third. It deals with lightweight vehicles.

Light trucks are blood relatives of passenger cars. In many cases they are built by the same makers. They come in parallel weights and in prices that are also fairly close to those for passenger cars. And the light trucks need about the same proportions of hard-to-get sheet steel.

• **No End in Sight**—So, the same problems which beset the auto makers today confront the light-truck producers. Their market is still at a stage of intense demand: A man who needs a panel delivery truck will take the first one he can get his hands on. Production is still far below that demand. The end of the backlog is not in sight.

Names of major passenger car makers are liberally sprinkled through the list of light truck builders. The simple reason is that a light truck is little more than a special body. Sometimes it is on a modestly strengthened passenger car frame; sometimes it is equipped with a little more powerful engine. The leaders in this weight group, listed alphabetically, include Chevrolet, Dodge, Ford, International, Studebaker, and Willys.

• **Newcomers**—Willys is a newcomer to this upper strata group. Its jeep classifies as a truck (to the unhappiness of

those displaced in the volume race and, consequently, makes the Toledo manufacturer a notable entry. Studebaker, too, is a newcomer to the truck bracket; previously its output of light vehicles was negligible.

Others in the light field are apt to be specialists of one sort or another. Duesenberg Corp., Detroit, for example, makes almost exclusively a stand-up delivery vehicle for milk routes, etc. Marmont Herrington Co., Indianapolis, confines itself largely to converting Ford trucks to all-wheel drives.

Crosley Motors, Inc., Connersville, Ind., builds small jobs for very light delivery work. Hudson Motor Car Co., Detroit, makes a few panel delivery trucks. But G.M.C. Truck & Coach Division of General Motors Corp., Pontiac, Mich., and Diamond T Motor Co., Chicago, produce standard lines of light trucks, like the top volume leaders.

• **Output Picture**—The sales outlook for these light jobs is now bright. In 1944 about 400,000 units in the lightweight class were built. (This class ranges up to 9,000 lb., gross vehicle weight—meaning the weight of vehicle and load combined.) Registrations, meanwhile totaled 2,492,534 in 1944, the last time a list of them was drawn up.

Meanwhile, demand continued with out letup. Evidence of this is the fact that output in the lightweight class in 1947 will total about 500,000 units, out of a total in all classes of approximately 1.2-million. This 41.7% proportion is

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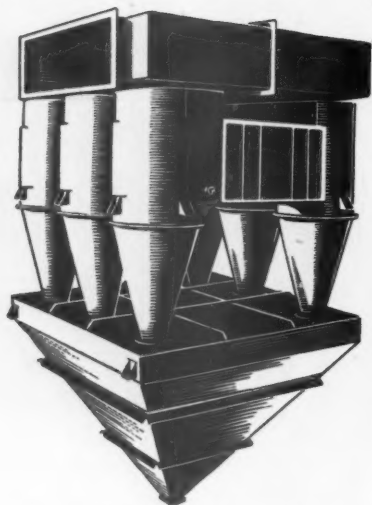
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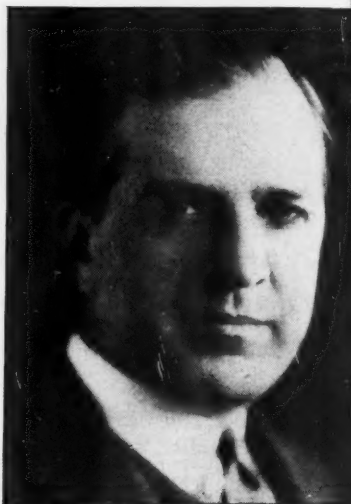
• **Sheet Steel Shortage**—This lower ratio in the face of intense demand is not to neglect. Sheet metal is the explanation. The light truck takes about as much sheet steel as a passenger car. This fact caught producers of both cars and trucks squarely on the horns of a dilemma. By building lightweight trucks they would cut directly into sheet steel available for cars.

They solved the problem with the answer: They increased the over-all ratio of trucks to passenger cars. But they gave the biggest share of the numerical increase to the large-truck class. Hence small trucks took no larger a proportion of steel against passenger car needs than in the past.

The results: Car and truck demands were fairly, though inadequately, satisfied. Production in the truck field was concentrated in top weight brackets where profits are higher. And the potential need for trucks was filled in segments where they would be put to more important uses.

• **Plants Revamped**—Meanwhile, plant improvements promise a flood of light trucks if demand holds up beyond the time when steel gets plentiful.

Dodge has revamped its already modern facilities at Detroit. Ford has moved its operations to new and highly efficient

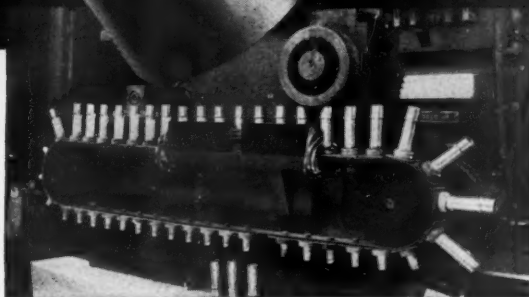


TRUCK COMMITTEE CHIEF

New Motor Truck Committee chairman of the Automobile Mfrs. Assn. is E. J. Bush, president of the Diamond T Motor Car Co. He succeeds R. F. Black, White Motor Co. president. Bush has been with Diamond T for more than 25 years. He started as assistant sales manager, coming direct from the Rainbow Division of the A.E.F. after World War I. In 1946, he became its company president.

WHY 22?

BRAZE 220 PER HOUR WITH TOCCO



PRATT & WHITNEY Aircraft Division of United Aircraft Corporation reports these economies in the TOCCO-brazing of steel tips to bronze bodies of valve guide assemblies:

FORMER OUTPUT: 22 per hour per operator by manual brazing.

TOCCO OUTPUT: 220 per hour per operator by TOCCO Induction Heating . . . 10 times as fast as former method . . . for lower costs.

PROCEDURE: The valve guide parts, fluxed and assembled with solder ring, are placed on pegs on a moving belt. This handling fixture passes the parts through an inductor coil where they

are TOCCO-heated to 1200° F. and silver soldered . . . an automatic and continuous operation.

TOCCO Engineers are at your service to help improve your production. No obligation.

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CUSTOMIZED ADHESIVE #7008
for Bonding Speaker Components



BOSTIK conforms to the semi-automatic procedure developed by Radio Corporation of America in the manufacture of home instrument speakers. It can be handled by *any* of the means in which other adhesives are used: wet bonding, dry bonding by means of heat and pressure, or tack bonding using solvents.

For these reasons, BOSTIK #7008 has been chosen by this ranking radio builder for this important process.

In laboratory tests made by Radio Corporation of America at 95% relative humidity and 100 degrees Fahrenheit for periods as long as three months, as well as in elevated temperature tests, *there has been no adhesive failure produced to date in speakers in which BOSTIK was used.*



With thousands of other manufacturers, too, BOSTIK has supplied right answers to tough bonding problems. Whatever materials, or combination of materials, you wish to bond together, call on B B. There's a BOSTIK Customized Adhesive for every job. Write for full information today . . . ask for your copy of "Adhesive Facts."

B B CHEMICAL COMPANY, CAMBRIDGE, MASS.

"Whatever It Is BOND IT WITH **BOSTIK**
Customized Adhesives"

cient headquarters at Highland Park, Mich. (BW—Mar. 1 '47, p. 35). Chevrolet has been building equally efficient factories which will turn out trucks as well as passenger cars.

• **When Materials Flow**—Others, working on smaller scale, have followed suit. The noteworthy aspect is that comparatively few of the light truck manufacturers have enlarged their facilities. But practically all, with a view to higher efficiency, have replaced old machines with stalled new conveyors and handling equipment. Once the flow of material to the factories allows a bigger output, the fruits of those investments will be evident.

For Future Sales

Ford prepares for buyer market in autos by studying consumer preferences, solidifying dealer organization.

The automobile industry's big problem today is to find cars for its customers. But, inevitably, the day will come when supply finally catches up with demand. On that day the industry will be faced once again with the normal problem: to find customers for its cars.

• **Ford's Program**—What Ford is doing to prepare for that day was detailed last week by Walter A. Williams, general sales manager. He spoke at a meeting of the Sales Executives Club of New York.

Ford's program has two main objectives: (1) to find out what auto users want in their new cars, and (2) to solidify dealer organization.

The company's effort to determine consumer preferences is divided into five main divisions:

- Standard public opinion polls are being taken by an outside agency.
- The company is doing a lot of research among potential customers on its own.
- Dealers are expected to report their reactions on what customers say about present cars, and what they want in future cars.
- Studies are being made among college students; Ford considers that they are advanced thinkers on car styling.
- Feminine opinion is being carefully studied.
- **Buyer Studies**—One example of the company's own customer research is "Demonstration interviews" are conducted with people who have just bought competing makes of cars. They are asked to drive a Ford, to compare its features with those of the cars they bought, to tell which they like better and why.

Another example: Ford is giving

Volumes of Experience in many fields

BLAW-KNOX products, experience, facilities and engineering knowledge have long been important aids to industry. If your business comes within the scope of our activities we will welcome any inquiries which may lead to our working together for a better, faster, lower cost job.

The following are representative of the services BLAW-KNOX is contributing to industrial progress:

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Building and Construction: Special build-

ing and sheathing paper—Caulking compounds—Greenhouse glass sealers—Concrete curing compounds—Sewer joint compounds—Expansion and contraction joint sealers.

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Miscellaneous: Corrosion resistant sealers for metal fabricated joints—Molded cork-asphalt shapes—Special adhesives and sealers for many other uses.

PRESSTITE ENGINEERING COMPANY

3936 Chouteau Avenue • St. Louis 10, Missouri

owners a chance to design their cars—on paper. It has prepared a book illustrating various types of bodies, engines, and accessories, showing the cost of each (BW—Dec. 6 '47, p. 12). The user makes his choice in each category, sends the completed form to Ford, and the company's expense.

• **Collegiate Guinea Pigs**—At one educational college, Ford maintains an exhibit of a number of different models. Students are encouraged to try them out, to go over them with a fine-tooth comb, and then to express their reactions.

At another college, the company is conducting what it calls "drivability" tests. Purpose: to design a car that conforms to the average person's height, weight, strength, eyesight, coordination, alertness, and other mental and physical characteristics.

All of the varied information was put in Dearborn. There it is pieced together and rushed to the designers, engineers for further study. The goal is to check all valid information against designs already on the drawing board to get the designs up to the minimum. The service has to be fast—it takes years to bridge the gap between drawing-board and the production of a new car.

• **Sales Organization**—The heart of Ford's dealer-relations program, Williams, is to keep the "sales organization alert and on its toes during the sellers' market and prepare it for the rugged experience in the buyers' market to come."

The company has divided the country into six regions and 33 sales districts. This makes the sales-management easier. Regional directors keep in touch with the district managers; each district manager has a complete staff of specialists in every phase of dealer operation. Their objectives: to get volume for the company, profit for the dealer, service for the customer.

• **Dealer Councils**—The dealers themselves are organized into a National Dealers Council—a representative, national cross-section, whose members are elected by all the dealers in their respective areas. The council meets once a year in Dearborn, with all expenses paid. There are also regional dealer councils, which meet at more frequent intervals.

Through these councils—national and regional—the company gets a pretty good idea of local reactions to Ford policies, merchandising, and advertising. An extra dividend: "By talking as they do to a large number of purchasers and prospects," Williams reports, "the dealers eventually soak up, through their pores, a composite portrait of tomorrow's car purchaser—what he will want, more important, expecting next year's automobiles."

It's springtime 256 times a second



Your doctor counts your pulse beat. The musician calls it rhythm. The sportsman knows it as timing. The engineer, who designed your automobile, refers to it as cycles.

The valves that admit and exhaust the gas to and from your engine are timed to form a cycle.

Spiral springs made of high-carbon round wire play a vital part in maintaining this cycle—in keeping your automobile engine running smoothly—at the

rate of 256 spring-actions per second. Taken for granted today, they were a major headache to the driver of yesterday. Today's springs are as superior to the springs of thirty years ago as are the cars themselves.

Improvements came with demand and competition. No other country advanced as rapidly . . . or as far.

Just as the discovery of America was made possible by enterprise capital, so the automobile was the product of free en-

terprise—including the cash that buys it. It's Springtime 256 times a second under the hood of your automobile and Roebling is proud of its contributions to that engineering feat.

Roebling is proud of this fact: the world over, automobile engineers have confidence in Roebling and its products.

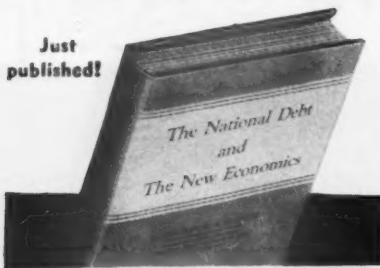
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By SEYMOUR E. HARRIS

Author of "Postwar Economic Problems", "Economic Reconstruction", "Inflation and the American Economy", etc.

286 pages, 24 charts, 47 tables, \$3.50

Whatever you want to know about the national debt, how it affects you and your business, can be found here. It explains carefully such issues as debt repayment, the clash of views between businessmen and economists, inflationary aspects, taxation and the public debt, the size of the debt, debt management, etc. Includes a concise presentation of the new economics on which current theories concerning the debt are based.

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Output, Prices Both Going Up

Most Detroit executives expect 1948 production to top this year's by perhaps 15%—if the Marshall Plan doesn't siphon off too much steel. Price rise seen certain due to higher costs.

One of the four best production records in the auto industry's history is being chalked up in 1947 (BW—Nov. 1 '47, p32). But next year should be even better. The most optimistic of Detroit's auto executives think that 1948 may well break all records—topping even 1929's output of 5,621,715 cars and trucks from U.S. and Canadian plants.

That would indeed be good news for the car-hungry public. But there's a catch to it. Prices are going up, too.

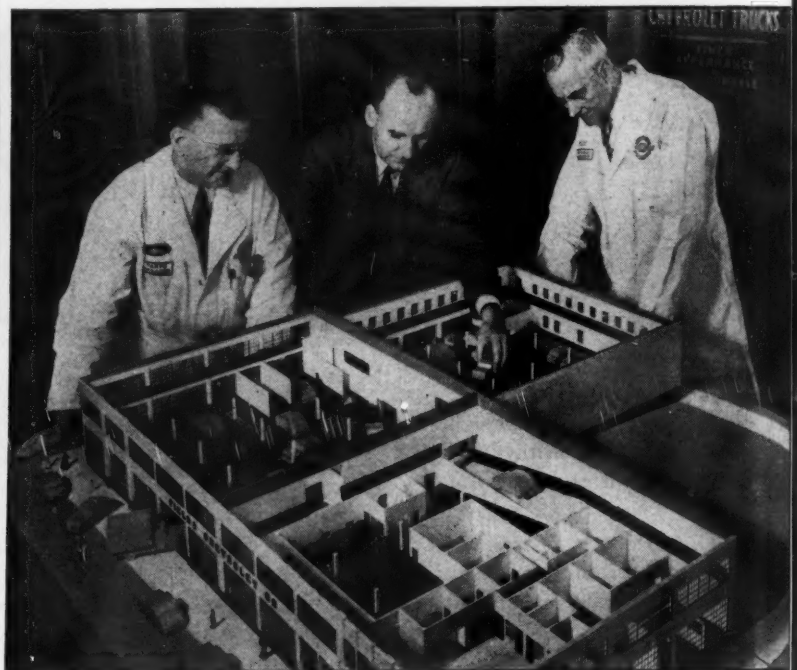
• **Prediction**—The only on-the-record prediction on output was made recently by Charles E. Wilson, General Motors president. He estimated that passenger car production would rise about 15%, trucks somewhat less.

But he hedged this prediction with two qualifications: (1) that no important work stoppages occur in supplier industries, and (2) that the Marshall Plan doesn't require too much steel.

The Marshall Plan is causing all of Detroit's top men to cross their fingers. One recent report out of Washington shows why they're worried. It credited a top government official with saying that buyers would have to wait six months longer than they do now for new-car delivery when the Plan goes into effect. The automakers interpreted that to mean that they'll get less steel next year than this.

Other officials in the auto capital agree with Wilson pretty much—although they haven't committed themselves publicly. One executive offered the opinion that the automakers will get more steel next year even if total steel output doesn't go up as expected (BW—Nov. 8 '47, p19). His reasoning: enough other consumer-goods industries will be cutting their presently abnormal demand to give the steel companies some leeway.

• **Kickoff**—The price rise on 1948 models has already started. Hudson kicked



Building Model Tells How It's Going

When customers ask "How's it going?" on Fields Chevrolet Co.'s building remodeling, they get a graphic and unusual answer. Realizing that even a bystander likes to be well briefed, the company prepared a scale

model that shows day-by-day progress on its expansion program. The finished project will consolidate operations for the Portland (Ore.) distributor and will provide enlarged facilities for all departments.



"We consider nothing but gray iron"

"We are satisfied with the castings
we've used for years"



Which is Your Company's Purchasing policy on CASTINGS?



"We relate casting cost only to the
final cost and salability of our product"

• The decisions you make as a management executive—the broad policy decisions; they are the ones that change the color of ink on a year-end earnings report; or infuse new life into an entire sales force; or catch a whole herd of competitors unawares.

If you, like Mr. C above, decide to "relate your casting cost only to the final cost and salability of your product", you may be opening the door to such an opportunity for your company. For if your product uses castings, American Magnesium Castings may show you sweeping changes . . . in earnings . . . in product salability . . . in salesmen's enthusiasm.

For, against the higher *metal* cost of American Magnesium Castings, you should credit these gains, any one of which may assume great significance: magnesium's *weight* means 3 times as many castings per pound of metal as gray iron . . . a *product* in which the castings are 75% lighter than steel, 35% lighter than aluminum . . . *mobility* of light castings that swing through production instead of being dragged . . . *machinability*, that often permits

first cut to be finish cut, produces a superlative finish.

If these advantages suggest an opportunity, the 59 years' light-metal experience of Aluminum Company of America will help you evaluate American Magnesium Castings fairly, provide the design help, suggestions on shop practices and finishing that you may need. Call your nearest Alcoa sales office, or write ALUMINUM COMPANY OF AMERICA, sales agent for American Magnesium products, 1711 Gulf Building, Pittsburgh 19, Pennsylvania.

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THIRTY-SEVENTH YEAR



it off last week end with an 11% increase. And practically everyone in Detroit agrees that prices will go up.

Said one top executive: "How we hope to bring prices down when the wage charge has gone steadily up since the end of the war, and when the CIO now plans another wage drive."

Another executive, president of one of the largest companies, said: "Tooling costs for new models are expected to triple what they were before the war. We can't think of bringing on a major change for our entire line at once—more—it'll be piecemeal from now on."

HUDSON PRICE UP 11%

A significant clew to the direct prices will take on new automobile models is shown by the prices of 1948 Hudsons (BW—Nov. 14, 1947). They were announced last week and average 11% higher than on 1947 models.

Hudson's base list price now stands at \$1,762 for its 3-passenger coupe. Last year this model was \$1,547.

The complete 1948 line includes 12 models, four of them in the Super series, and two each in the Commodore Six, Super-Eight and Commodore Eight lines. All are completely redesigned.

The six-cylinder engine is an entirely new powerplant, rated at 121 hp. The Super-Eight engine has also undergone considerable revision, and now turns 128 hp.



HEADS FORD PUBLICITY

New director of Public Relations for Ford Motor Co. is Charles E. Carll. A former executive on midwest and eastern newspapers, Carll came to Ford in 1942; he has been head of the company News Bureau since 1944. The Public Relations department includes the News Bureau and the Community Relations, Graphic Arts, and Guest Relations sections.

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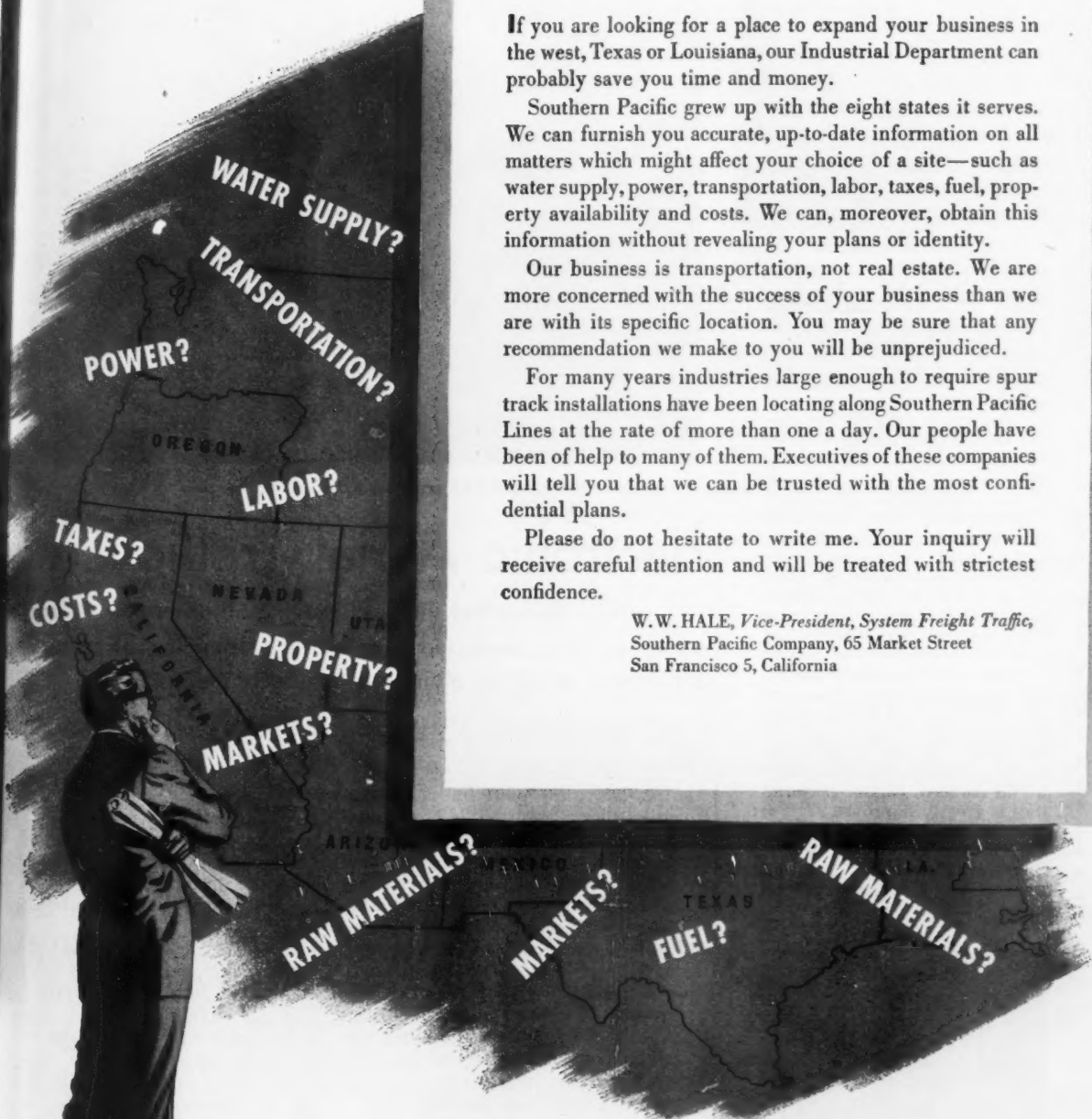
Southern Pacific grew up with the eight states it serves. We can furnish you accurate, up-to-date information on all matters which might affect your choice of a site—such as water supply, power, transportation, labor, taxes, fuel, property availability and costs. We can, moreover, obtain this information without revealing your plans or identity.

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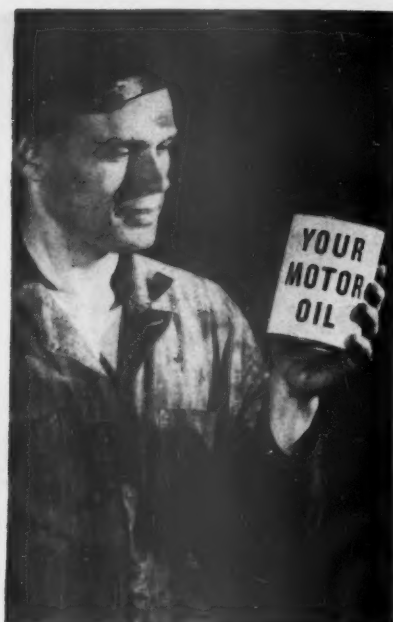
For many years industries large enough to require spur track installations have been locating along Southern Pacific Lines at the rate of more than one a day. Our people have been of help to many of them. Executives of these companies will tell you that we can be trusted with the most confidential plans.

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Santolube, Reg. U.S. Pat. Off.



SERVING INDUSTRY... WHICH SERVES MANKIND

PRODUCTION



ANTENNA TOWERS send out radar signals that pick up moving planes

Electronic Aerial Traffic Cop

New device that shows all moving objects within 100 miles of an airport was developed by Airborne Instruments Laboratory, Inc., a company made up entirely of research scientists.

La Guardia Field has a new traffic cop.

Last week the traffic device, one of the world's most powerful radar sets (picture, above), went on 24-hour duty. It will permit continuous study of traffic patterns in a 100-mile radius. The scope, or picture tube, shows only moving objects against an electronically projected background map of the area.

• **Event**—Getting the device into full-blown operation is an important occasion for one of its sponsors: Airborne Instruments Laboratory, Inc., of Mineola, N. Y. Here is an outstanding example of how an industry—in this case air transport—can benefit when a group of scientists goes into business.

The scientists who make up A.I.L. come from three well-known, government-backed, wartime electronic laboratories: the Radiation Laboratory of Massachusetts Institute of Technology, the Radio Research Laboratory of Harvard

University; and the Airborne Instruments Laboratory of Columbia University. The organizational setup of the company was also patterned after the projects. The result is that A.I.L. offers industry a new kind of research and development organization in which academic objectivity is combined with the managerial vigor of private enterprise.

• **Problem**—The story behind La Guardia Field's electronic traffic cop is a typical example of how the enterprise world. The Air Transport Assn. is interested in finding more efficient, safer methods of controlling aircraft in congested regions. So it put the problem of adapting to commercial use the wartime Microwave Early Warning surveillance radar (MEW) up to Airborne Instruments engineers.

The Army Air Forces furnished the equipment; land and buildings at Queens College, Long Island, were

ven by the City of New York; the Air Transport Assn. put up the engineering finances; the Civil Aeronautics Authority agreed to operate the equipment. Airborne Instruments supplied the electronic knowledge and mechanical ingenuity needed in order to solve the problem.

The result is a practical peacetime adaptation of radar. At the CAA's Air-Traffic Control Center at the field



ADAR PIPS against a background map show the location of moving planes

to which point the picture is relayed) plane traffic is scanned (picture, above). Airlines will benefit: Ultimately, schedules will be speeded; handling of incoming planes will be simplified; and "lost" planes put back on the straight and narrow path from which they have strayed.

History—Getting electronic research into civilian life is Airborne Instruments Laboratory's primary aim. Near the end of the war, the commercial airlines decided that they wanted the electronic development program which had done such a good job for the military to be continued. It was being run by the Office of Scientific Research & Development. So A.I.L. was set up late in August, 1945, shortly before the OSRD laboratories were scheduled to go out of business.

A.I.L. set up shop at Mineola with facilities and equipment leased from the Navy—during the war they were used by Columbia's Airborne Instruments Laboratory. One of its early jobs, still going on, is a contract with the Navy Bureau of Aeronautics to continue certain projects partly completed by both Harvard and Columbia under the OSRD program. The airlines stepped in, offering advice and lending personnel, to help the transition of the small company from wartime to peacetime activity.

Projects on which A.I.L. works come from four sources:

Aeronautical Radio, Inc., is a group set up by the airlines to handle electronic problems and to act as liaison be-



YOU CAN BUY QUIET FOR ONLY 3¢ A DAY

Take a few seconds off and just listen to your office. Have you ever realized how much your work is hampered by the din of bells, machines, footsteps, and voices—how the sounds that make up office noise destroy your efficiency? Yet for only 3¢ a day you can end that clamor with a ceiling of Armstrong's Cushiontone acoustical tile.

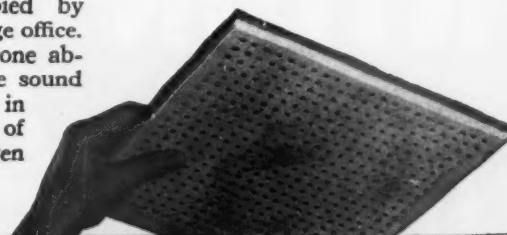
3¢ a day, figured over four or five years, is all it costs to install Cushiontone over 75 square feet—the space occupied by each person in an average office.

Armstrong's Cushiontone absorbs up to 75% of the sound that strikes its surface in the 484 fibrous holes of each 12" square. Not even

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Cushiontone is a good reflector of light and is easy to maintain. It also provides extra insulation. Your local Armstrong contractor will be glad to prove with a free estimate the economy of a Cushiontone ceiling.

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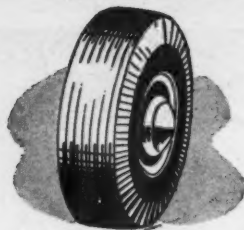


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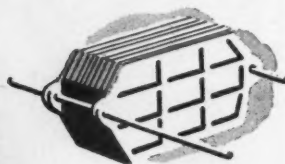
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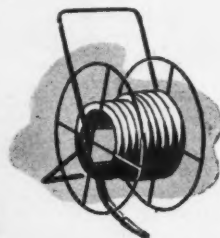
...to make sewing thread that's much stronger and more uniform. It's used for shoe uppers, bookbinding, upholstery.



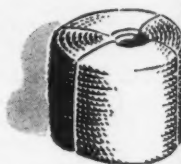
...to make lintless filter cloths for liquid filtration or dry sifting that resist abrasion and have excellent cake discharge and cleaning characteristics.



...to make lighter, longer-lasting commercial laundry nets that increase the pay-load and reduce replacement costs.



...to make garden and industrial types of hose that is lighter, more durable and pliable... can be coiled as readily as soft rope.



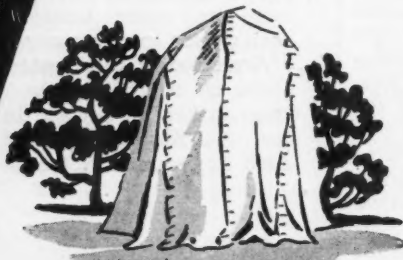
...to make ropes with a high strength to low weight ratio, and elasticity previously unknown, and high resistance to abrasion, and freedom from deterioration by mildew and marine organisms. For example: aviation and marine tow lines, lariats, yachting rope, spindle drive ropes in textile mills.



...to make fabric for airplane de-icers that stands up under repeated "stretching-recovery" action—also lightweight fuel cells that are unaffected by gasoline.



...to make automotive, steam and pressure instrument diaphragms that are more sensitive, more durable and dependable, and cut replacement costs.



...to make fumigation tents (and other types, too) that are lighter, yet stronger and more tear-resistant, easy to handle, quick drying, resistant to deterioration from mildew and soil rot, convenient to store, more economical to maintain.

..and here's WHY

Perhaps you can profit from the remarkable combination of properties found in Du Pont Nylon fibers

Nylon has high tensile strength and light weight. It is twice as strong and half as heavy as the same size of aluminum wire . . . and equally as strong as some types of steel wire of the same size. Even when wet, nylon retains 85 per cent of its strength.

Nylon has unusual wear and tear resistance. Its toughness resists abrasion. Its smooth filaments minimize friction wear. Nylon yarns have a high "loop strength"—do not cut themselves when tied in knots.

Nylon stands up against mildew and soil rot. It is not attacked by insects or affected by petroleum oils and alkalies. Its strength is little changed by long immersion in salt water.

Nylon can be repeatedly stretched or flexed without losing elasticity. It has a perfect "shock-absorber" action . . . stretches rapidly . . . recovers slowly.

Nylon dries quickly because of its low moisture absorption.

Nylon is easy to keep clean because of its smooth surface. Dirt and soilage can easily be removed from nylon fabrics by washing or dry cleaning.

Nylon can be heat set—shaped under moist or dry heat. Setting provides excellent control over shrinkage. An all-nylon fabric has outstanding dimensional stability.

Nylon does not support the spread of flame. And resistance to deterioration under heat makes possible long exposure to steam and dry heat at elevated temperatures.

How about You...and Nylon?

Do the applications and properties mentioned here suggest a use for nylon in your plant . . . in a product you are making or are planning to make? If so, chances are we can help you. While we do not make the finished nylon products shown on the opposite page, we *do* know about nylon fiber. And our long, intimate experience in developing this and other fibers is at your service.

New booklet "Nylon Textile Fibers In Industry" has been prepared to help you estimate the value of this versatile fiber. It contains more information on nylon and goes further in telling how industry is using nylon to its advantage and that of its customers. Just send your request for this booklet on your company letterhead to the Nylon Division, Room 6510, E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.

BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY



For nylon...for rayon...for fibers to come...look to Du Pont

If you use
WHITEPRINTS
for making prints of
tracings
here is your Machine!

PEASE "55-G"
outperforms any other
Whiteprinting Machine
at anywhere near the price.



PEASE "55-G"

Pease "55-G," the newest medium production Whiteprinting and Developing Machine (Dry Direct Process) on the market, possesses so many exclusive, outstanding features and so much greater printing and developing speed and capacity, that, considering initial investment, it is in a distinct class by itself, completely outperforming any other machine at anywhere near the price.

Pease "55-G" thus assures greater efficiency and economy in the reproduction of your tracings because it actually produces prints 33 1/3% faster than any other Whiteprint equipment selling for within \$1,000 of its price . . . and what is more, it handles cut sheets or roll stock up to 42 inches wide, by any practical length, with equal facility.

If your printmaking requirements call for Blueprints in addition to Whiteprints, investigate PEASE "11-S"—the lowest priced high grade Blueprinting and Processing Machine made—production speed is 12 feet per minute.



Free!

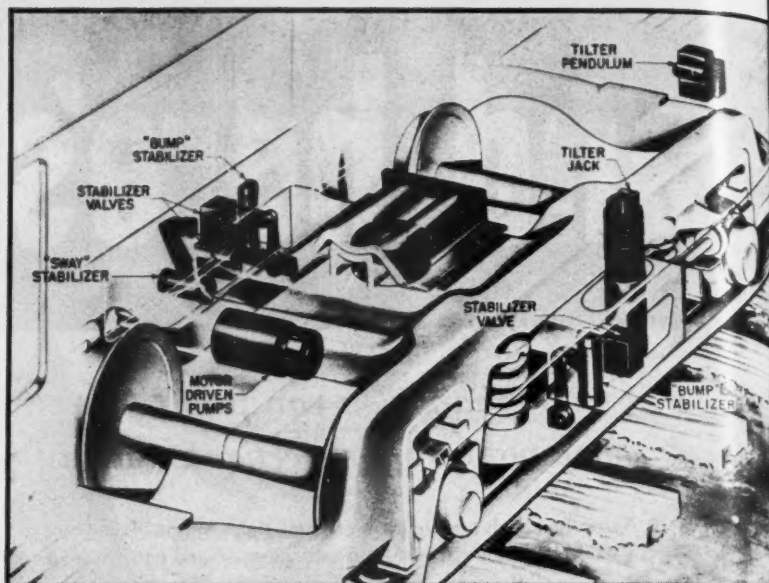
Attach coupon to your letterhead for a 238-page book of valuable information on the complete PEASE line.

THE C. F. PEASE COMPANY
2608 West Irving Park Road
Chicago 18, Illinois

I am interested in receiving more information and prices on

- ☐ PEASE "55-G" Whiteprinting and Developing Machine
☐ I shall be glad to receive a free book describing PEASE equipment.

Name _____ Position _____
Company _____
Address _____
City _____ Zone _____ State _____



Smoothing Out Railroad Swing and Sway

Swing and sway the railroad way is a common experience to many travelers. High speed aggravates both the "bumping" effects of minor unevenness in track surfaces and the sway caused by tracks being slightly out of line. Sharp curves cause tilting. Such bumps, sways, and tilts can be ironed out, say Westinghouse Research Laboratory engineers. The iron: a new shock absorber.

The Westinghouse device uses hydraulic "muscles" to offset the disturbing thrusts. Six hydraulic cylinders—four for vertical bumps, two for side sway—are fastened between the wheels and the car body (picture).

When the car starts to bump, the slight movement opens one valve, closes another, causing high-pressure oil to flow into the proper cylinder. This drives the piston in that cylinder with just enough force to hold the car steady. It's all done in about three one-thousandths of a second.

When the train takes a curve, a gyro-controlled pendulum device in the shock absorber swings toward the outside of the curve if the train is going too fast; swings toward the inside if it is going too slow. Either motion throws a switch, causing the proper screw-jack to tilt the body to the right angle.

The jacks can tilt the body a total of six degrees either way within two seconds. Westinghouse engineers say that the device can automatically bank the car to within one degree of the mathematically correct angle.

The new shock absorber also cuts down another problem: that of bouncing. With conventional shock absorbers, successive bounces "add up" to a bigger and bigger bounce. Engineers call this resonance. The new device doesn't do away with the problem, but it does cut down resonance. It is said to be 300% better than the usual shock absorber in this respect.

tween the airlines, manufacturers, and the Federal Communications Commission. It formulates electronic development programs, farms them out. Its president, D. W. Rentzel, serves as director of A.I.L., which is a wholly owned subsidiary of Aeronautical Radio, Inc.

The Air Transport Assn. provides for planning and financial sponsorship of projects for the transport industry. Gen. Milton Arnold, A.T.A. vice-president, assigns appropriate jobs to the laboratory.

The armed services have contracts with A.I.L. which provide that A.I.L. consult and work with electronic equip-

ment makers, aircraft builders, and various research laboratories.

Private industry is being wooed by A.I.L. for additional work along electronic lines.

• **Six Divisions**—The company is headed by Hector R. Skifter. It is set up in six main sections, all responsible to the director of research and engineering, J. F. Byrne. Each section has ten engineers and four technicians, on the average. Reasons for keeping group size so small: (1) to develop individual initiative, and (2) to keep a "research" atmosphere rather than a commercial atmosphere, to spark output and quality. The company has an air navigation

and traffic control section (which was primarily responsible for the LaGuardia field accomplishment); an antenna section (increasingly important as speeds go up and higher radio frequencies are used); a transmitter section (top-secret work to combat enemy radar is one project); a receiver section (which develops panoramic receivers and similar equipment); a special devices section (new techniques, in many cases, require special mechanisms); and a model section (which transforms research and developmental ideas into three dimensional realities).

Hope—A.I.L. believes that its combination of young researchers with an almost academic atmosphere will encourage wider use by industry of electronic developments and continued progress in research. This, it hopes, will eventually mean good profits.

FUEL FROM WASTE

One tight squeeze on most manufacturers today is the cost of conventional fuels. Now it's possible to loosen the squeeze considerably by burning byproducts usually regarded as waste.

So said Otto de Lorenzi of Combustion Engineering Co., N. Y., last week. At the annual meeting of the American Society of Mechanical Engineers in Atlantic City, he detailed the progress made recently in byproduct furnace design.

De Lorenzi stated that furnaces were already blueprinted to handle byproduct fuels from oil refineries (asphaltic pitch, petroleum coke); steel mill operations (blast furnace gas, coke breeze); lumber industries (wood waste); paper mills (wet bark, culled wood, sawdust); and sugar refining (cane trash or bagasse). The furnace designs are now under study for improvements in drying methods, feeding, and burning of the fuels.

BETTER STEEL-HARDENER

Steel is usually hardened by cooling it quickly from temperatures above red heat. The most common "quenches" are air, oil, water, or molten salts. Of these, water hardening is generally classified as the fastest.

But the Ford Motor Co. has lately been trying out solutions of caustic soda. These solutions, according to Ford production men, are the fastest yet found. Solutions with a concentration as low as 2.5% of caustic dissipate heat from steel at about twice the rate water does. As a result, many other companies are beginning to use caustic quenching.

The Ford experiments showed that cheap carbon steel can be made as hard by caustic quenching as higher-priced alloy steels which have been quenched in oil.

Still another advantage is the "bite"

18-8

STAINLESS...

Tried and True

TO anyone but a metallurgist, the nominal analysis of Circle ① 22XM (table at left) may not look much like an "18 and 8" alloy. And yet it is the legitimate offspring of this famous family of corrosion resistant alloys which have proved their worth in hard, practical service for a generation.

Improvements in analysis, in heat treating, and in modern foundry practice make it a practical material whenever corrosion cuts into operating profits or threatens product integrity.

Circle ① 22XM is one of several "18 and 8" Stainless Alloys which account for a high percentage of our electric induction furnace output. We will be glad to help select the right one for your purpose. Write for convenient reference chart.

LEBANON STEEL FOUNDRY • LEBANON, PA.
"In The Lebanon Valley"

ORIGINAL AMERICAN LICENSEE GEORGE FISCHER (SWISS CHAMOTTE) METHOD

LEBANON CIRCLE ① 22XM

NOMINAL ANALYSIS

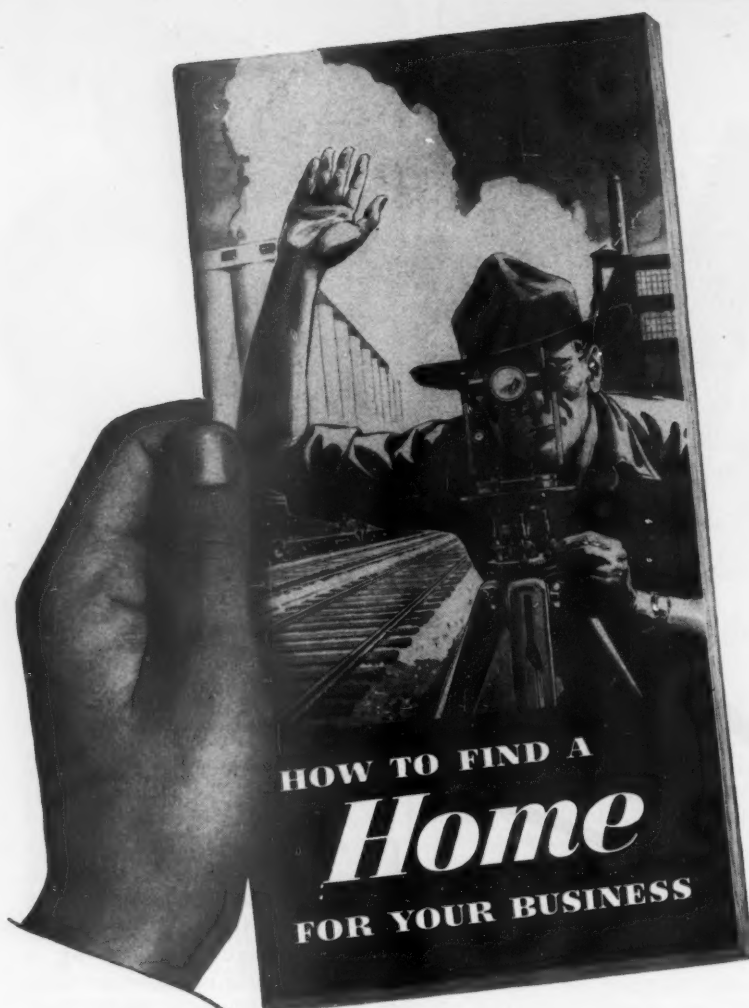
Carbon Max.	0.07
Silicon	1.25
Manganese	0.75
Chromium	19.50
Nickel	10.00
Molybdenum	2.25

NOMINAL PHYSICAL PROPERTIES

Tensile Strength	82,000
Yield Point	42,000
Elongation in 2"-%	50
Brinell Hardness	160

LEBANON Alloy and Steel **Castings**

Circle ①



Every executive contemplating a relocation should read this leaflet. It outlines a service that provides confidential, complete, current information on available industrial sites and plants.

FOR busy executives, finding a convenient source of full information about available buildings and plant sites is an important first step.

That's where you can use The Milwaukee Road's leaflet, "How to Find a Home for Your Business." It tells how our Industrial Development Department provides a service to bring new industries to communities in the twelve states served by The Milwaukee Road between the Great Lakes and the Pacific Ocean.

It shows how we plot industrial districts . . . outlines the type of data we can provide on labor, markets, shipping and power fa-

cilities, raw materials, taxes and residential conditions.

Whether your business is large or small, we can help you relocate. Our confidential services are available without obligation. Write for leaflet today to J. C. Ellington, Industrial Commissioner, The Milwaukee Road, 310B Union Station, Chicago 6, Ill.



Black area shows Milwaukee Road States

THE MILWAUKEE ROAD

The friendly Railroad of the friendly West

of the caustic. Often scale patches blanket small parts of steel surface at the time of quench and cause soft spots. These are more easily loosened by caustic than by water. Less vapor is formed hence "vapor blanketing"—another cause of soft spots—is minimized.

Also the higher rate of heat transfer of caustic solutions is a help in the summertime. Reason: Water temperatures rise with air temperatures, slow down the rate of water quench.

ROBOT EQUATION SOLVED

Solving complex chemical equations involving energies of various molecules in a compound, can get to be a pretty complicated business. However, scientists at Northwestern University's chemical department are making their work easier with a new automatic machine. Its jawbreaking name: the potentiometric secular equation computer.

The machine is easy to use. It's based on the fact that chemical compounds, like all matter, are made up of molecules. Each molecule has one or more fundamental vibration frequencies. That's what the calculator computes.

"WHIRL PIT" WELDING

At Massachusetts Institute of Technology experimental weldments are getting the "whirl pit" treatment.

In an armor-plated pit, 40 in. in diameter and 9 ft. deep, circular steel plates are rotated at high speeds until they actually burst. The disks—up to 8 in. in diameter—are suspended on a flexible steel drive shaft and rotated in a high vacuum at speeds up to 35,000 r.p.m. The vacuum prevents heat generation in the plates which could be caused by friction with air. It also allows quick braking when air is admitted.

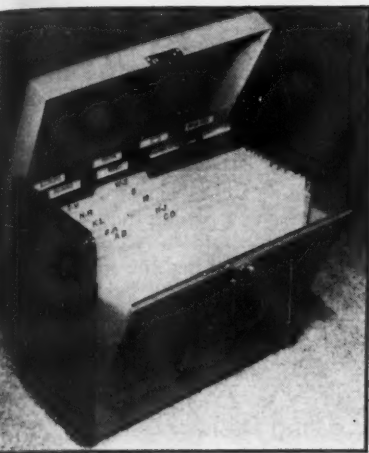
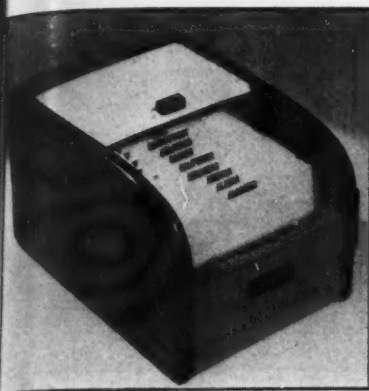
As the disks whirl, the substance at the center of the plate begins moving toward the edges. This results in thickening the disk at the perimeter.

P. S.

Hypergolic: That's the 1947 way to describe rocket fuel combinations that are self-igniting. These are opposed to fuels which must be "sparked" to start the firing process. Hypergolic fuel combinations—like nitric acid and aniline—were discussed by Aerojet Engineering Corp. engineers at the annual meeting of the American Society of Mechanical Engineers.

Quick freezing of foods by direct immersion in liquid nitrous oxide was done on a pilot-plant basis in Germany. Another Commerce Dept. report, available through the Office of Technical Services and numbered PB-1269, describes the method in detail.

NEW PRODUCTS



Filing Cabinets

Two new file cases, one for the office, the other for home use, are announced by Moldmaster, Inc., 899 E. 149 St., New York 55.

The office cabinet (top) has a sliding top, holds standard 4-in. x 6-in. index cards. The case has phenolic plastic sides and a steel or aluminum body. Designed with rounded shoulders, it measures approximately 8 in. wide, 10½ in. deep, 6½ in. high.

For personal records, Moldmaster makes a plastic and metal case (bottom) with carrying handle and lock. The file weighs 5 lb., comes with index.

• Availability: early 1948.

Water Stopper

Rainchek is a water repellent that is said to penetrate masonry, protect it against discoloration and deterioration from water. The liquid works through the small cracks in the building material. It spreads to form a film of solid matter that not only repels water but binds together loose dust particles.

Protection Products Mfg. Co., Kalamazoo, Mich., makers of the product, say that it can also be used as a base



HYSTAWAY for ACTION

Hyster Hystaway mounted on a "Caterpillar" track-type tractor means *more work production*.

Hystaway is 3 production tools combined in one machine — dragline, clamshell and crane.

This 3-way tool does everything that a dragline, clamshell or crane can do — plus bulldozing work — *and costs less!* Equally important, Hystaway can be mounted on the tractor by 2 men in 2 hours and taken off in 1 hour (after the initial installation).

Hystaway is made for "Caterpillar" D8, D7 and D6 tractors — new or old. Hundreds of Hystaways are in use on all kinds of construction jobs, all over the world, cutting production costs, speeding work schedules, earning dividends for their owners. Your "Caterpillar" distributor can arrange a demonstration.

CURRENT DELIVERY... Best news of all — you can get current delivery from your "Caterpillar" distributor. Write for detailed literature.

HYSTER COMPANY

2907 N. E. CLACKAMAS ST., PORTLAND 8, OREGON
1807 NORTH ADAMS STREET, PEORIA 1, ILLINOIS





ENERGY for industry!

The breath-taking beauty of Alberta's Rocky Mountains has special significance for Industry. From their eternal snows, Alberta has virtually unlimited sources of electricity from water power. Province-wide power lines already provide abundant, cheap electrical power. The potential hydro-electric power resources are comparable with any area in the world. Add cheap electricity to lavish coal, oil and gas supplies, and you have still another great advantage for building your new plant in Alberta.

Alberta has three great drainage basins; the MacKenzie to the Arctic, the Saskatchewan to Hudson's Bay, and the Milk River to the Missouri. These systems contain thirty-four practicable, determined power sites. Four have been utilized to provide an annual power output of over 90,000 horse power. Power is supplied by private companies under the supervision of a Board of Utilities Commissioners. Rates for various Provincial areas will be gladly supplied on request. You'll find them another attractive factor for industrial expansion in Alberta—the free land of free enterprise.

ALBERTA has WHAT YOUR BUSINESS needs!

WRITE --- THE INDUSTRIAL
DEVELOPMENT BOARD
Administration Building

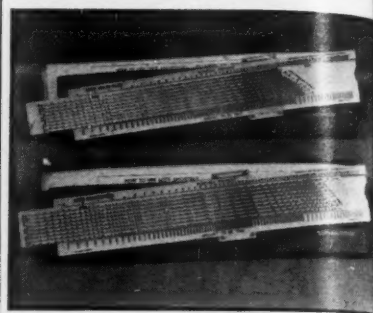


GOVERNMENT OF THE
PROVINCE OF ALBERTA
Edmonton, Alberta, Canada

AG-13

for inside painting. The repellent works on cement, concrete, brick, tile, and stucco.

• Availability: immediate.



Payment Figurer

The Amortizer, an improved "slide rule," can be used to solve amortized loan or instalment purchase problems. It is made in a new model by Smith Lee, 704 S. Spring St., Los Angeles.

Eighteen interest rates, ranging from 2% to 7%, are shown on the rule. Amortization periods run to 25 years for all rates and to 40 years for 4%. The scale showing the amount to be paid reads from \$1,000 to \$20,000.

The rule is made from kiln-dried holly, measures 14 in. in length.

• Availability: January.

Casting Resin

A casting resin to simplify work on small electrical assemblies is being made commercially by Mathieson Alkali Works, Inc., 60 E. 42 St., New York 17. The material was a wartime development of the National Bureau of Standards. Its essential ingredient: dichlorostyrene.

The resin is poured over electrical parts. When it sets, it holds the pieces in a firm base that is said to provide electrical insulation and resist moisture. The industrial uses for the casting resin cover a wide range of small electronic devices.

• Availability: immediate.

Small Parts Welder

Small parts that are hard to weld by hand can be joined automatically with a new machine that has been developed by Tweezer-Weld Corp. The equipment works with an electronic welding and timing device.

Assemblies or small parts are fed to a turret either by hand or automatically from a hopper. Components can be shaped before welding so that parts leaving the machine are ready for assembly into the final product.

One use is welding tabs to radio tube cathodes; the machine reportedly can



McGRAW-HILL
P U B L I C A T I O N S

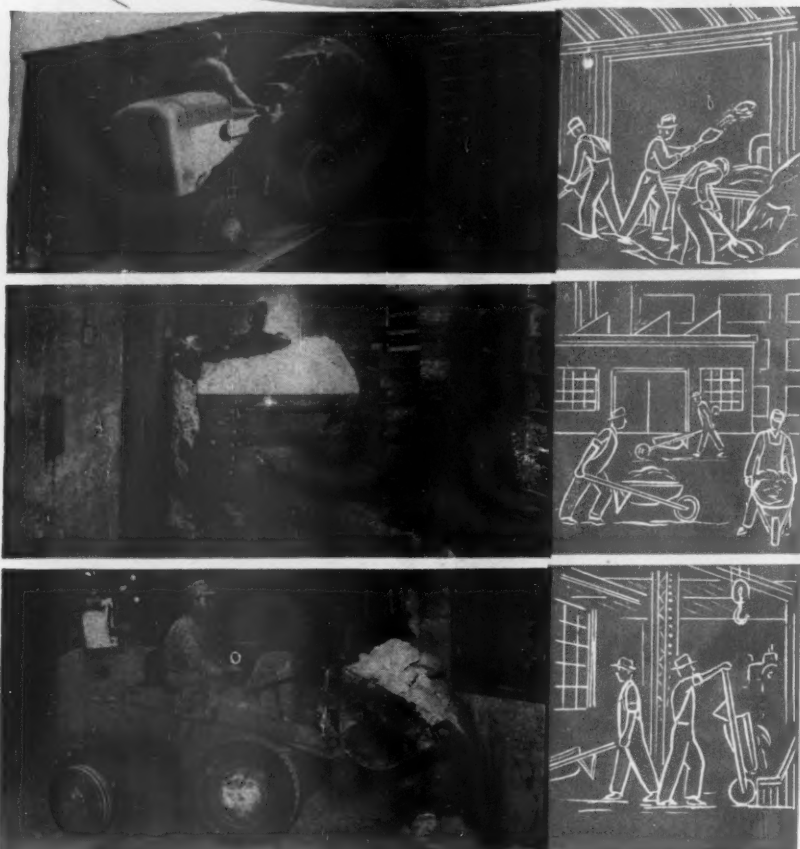
HEADQUARTERS FOR INDUSTRIAL INFORMATION
330 WEST 42ND STREET • NEW YORK 18, N. Y.

Get Out of the RED

WITH A

HOUGH Payloader

SAY "HUFF" PATENTED



Let one man and a Payloader take over your tough bulk material handling jobs, releasing your present labor crew for other jobs within your plant. Cut your labor turnover—cut your payroll—cut your material handling costs.

The Payloader handles any bulk material quickly, safely, economically—salt, chemicals, clay, ores, fertilizer, sand, coal—travels anywhere; through narrow aisles and doorways, inside of boxcars, in ships' holds, in your yard or plant.

Ideal for yard maintenance and snow removal.

Built in 3 sizes, 10½ cu. ft., ¾ yard and 1 yard capacities. Sold and serviced through a nation wide distributor organization. A demonstration in your plant will be gladly arranged—or complete descriptive literature sent upon request.



THE FRANK G. HOUGH CO.

700 SUNNYSIDE AVE. **7** LIBERTYVILLE, ILL.

TRACTOR SHOVELS SINCE 1920

handle 3,000 of these per hour. The manufacturer's address is 1060 Broad St., Newark, N. J.

• Availability: according to specification



Vibrating Grader

Vibration applied to the cutting edge of a new Blaw-Knox subgrader is said to make the machine more efficient in cutting earth and in shaving road subgrades. The unit reportedly cuts through hard materials without transmitting shock or movement to the road forms on which it rolls. It automatically produces a grade that is true to crown and cross-section specifications.

Vibrations at 2,000 impulses per minute are created by generators mounted on the back of the cutter assembly. Movement of these vibrations is in a backward and forward direction, directly into the subgrade.

To give final shape to the subgrade, the machine has a leveling device which is towed behind the grader. The Blaw-Knox Co. is at 2042 Farmers Bank Bldg., Pittsburgh 1.

• Availability: three weeks.

P. S.

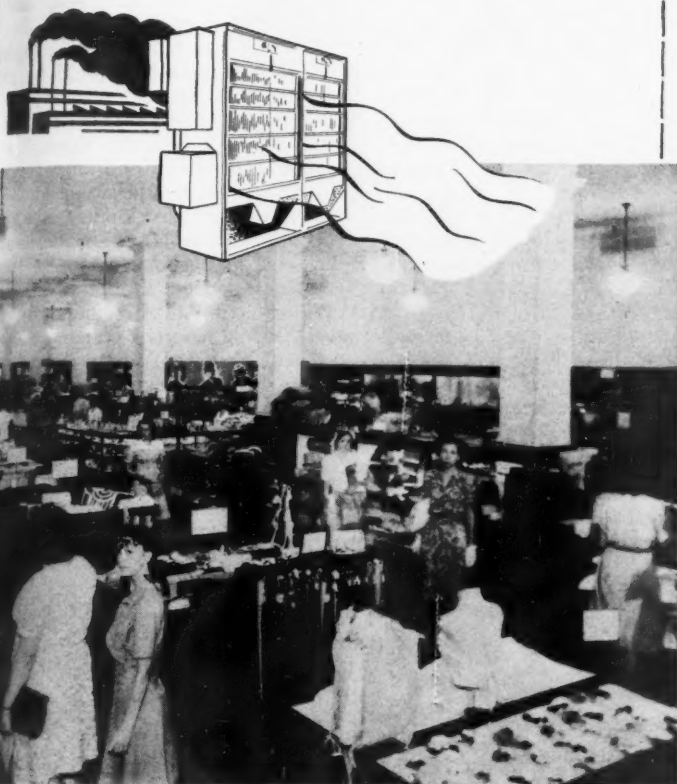
Pressure gage developed by Manning Maxwell & Moore, Inc., Bridgeport, Conn., uses Nylon in its movement. It's said to have a low friction coefficient, a high resistance to shock and corrosion.

Corners on cellulose acetate boxes are sealed electronically with a new machine manufactured by Spectrum Engineers, Inc., 540 N. 63 St., Philadelphia. Principles used were developed by Eastman Kodak Co.

Potato baker holds a single spud inside an aluminum shell. It works over an open flame on top of the stove. Kell-ray Products, 1149 N. Formosa Ave., Hollywood '46, says it takes 20% less time than oven-baking.

Household glue has "strength of liquid glues but is as clean as library paste." Made from polyvinyl resin by Casein Co. of America, Division of the Borden Co., 350 Madison Ave., New York 17.

They send *air* to the cleaners instead of *merchandise*



**Name furnished on request*

SOOT and smoke were taking a heavy toll of merchandise in this large Southern department store.* To combat soilage and resultant mark-downs, a complete dry cleaning plant was installed which reduced losses materially.

Then they tackled the basic problem—elimination of atmospheric dust and dirt. Fully automatic, self-cleaning, electronic air filters were included as part of a new store-wide air conditioning system. The results were soon apparent. Soilage was reduced to a point where it was no longer economical to operate the dry cleaning plant; the need for frequent redecoration was eliminated; and store cleaning costs were cut appreciably.

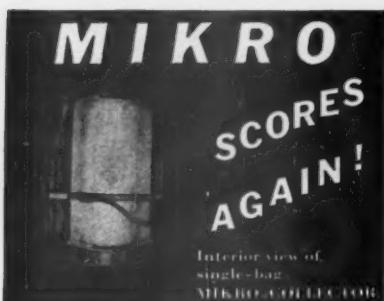
Dust-laden air is the source of many product, processing and personnel problems that can be solved effectively by the right type air filters. A representative of the American Air Filter Company will be glad to analyze your needs. His recommendations will be both sound and unbiased because he represents an acknowledged leader in the field offering the only complete line of air filtering equipment. Write or call us for name of your nearest American representative.

AMERICAN AIR FILTER CO., INC.

387 Central Avenue, Louisville 8, Ky.



AIR FILTERS
AND DUST CONTROL EQUIPMENT



We have supplemented our line of MIKRO-PULVERIZERS and MIKRO-ATOMIZERS in use throughout the world, with a triumph in the art of dust collection.

You will agree, when you see our new MIKRO-COLLECTOR in operation, that it is radically different from any other system of its type. The revolutionary principles employed insure optimum recovery and sensational filter rates. With its perpetually clean filter of hard-pressed wool felt, it has proven its ability to handle even those damp and hitherto baffling dust loads. It will keep your dust out of the air and your profits in the bag.

You cannot afford to ignore this complete and compact answer to your dust problems. WRITE FOR your copy of our MIKRO-COLLECTOR Bulletin today. Quick action means quicker delivery.

PULVERIZING MACHINERY COMPANY
37 Chatham Road, Summit, N. J.

MIKRO-COLLECTOR
By the makers of
MIKRO-PULVERIZERS and MIKRO-ATOMIZERS



1676 MILES FOR \$9.30

If you want real performance, choose CROSLEY! This fine, new car reverses the trend toward heavy, cumbersome, expensive automobiles—weighs only about $\frac{1}{2}$ as much and operates for about $\frac{1}{2}$ as much as other so-called light cars.

For example: Mrs. Marvi Neumann of Miami, Florida, drove to Black Mountain, N. C., and back, (1676 miles) spent only \$9.30 for gas.

And the new CROSLEY truly IS a FINE car. In the convertible or sedan, you get ample room for 4 husky people plus luggage. You get smooth, safe, effortless driving.

In the $\frac{1}{2}$ ton CROSLEY PICKUP, you get real economy for service calls, light deliveries, etc.



In every CROSLEY you get the startling COBRA (Copper BRAzed) steel engine with $7\frac{1}{2}$ to 1 ratio; delivers 35 to 50 miles per gallon—care-free cruising—lightning pickup.

CROSLEY

a FINE car

For information and literature, write: Crosley Motors, 2532-BN Spring Grove Ave., Cincinnati 14, Ohio

MARKETING

Sales Research Grows

Du Pont, Shell Oil, and A. & P. tell meeting that measuring and evaluating distribution can pay off big dividends. So all three see marketing as an opportunity, not as a problem.

Big industries and retailers believe that distribution is not a problem. Instead, it is their opportunity for continuing business growth and success.

That was the theme of a discussion of postwar marketing trends last week. It took place at a meeting of the American Society of Mechanical Engineers in Atlantic City. Fenton B. Turck, president of Turck & Hill, management engineers, presided at the session. Speakers represented a producer of materials for industry (E. I. du Pont de Nemours & Co.), a producer and distributor (Shell Oil Co.), and a distributor and retailer (the Great Atlantic & Pacific Tea Co.).

• **Du Pont**—Luther D. Reed, its director of trade analysis, spoke for du Pont. His keynote: "There is an engineering job to do which must establish the same type of scientific management within the art of selling which we today

placidity accept within the sphere of production."

Distribution, he explained, can be measured and evaluated as exactly as production has been. For example, start toward evaluation could be made by setting up sales per man-hour.

• **1,200,000 Reports**—Du Pont, Reed said, follows its products through manufacturing and distribution. Its aim is to discover means of boosting sales, finding new uses, developing new markets. The company's 14 trade analysis divisions get reports from salesmen, analysts, engineers, as well as data from other sources. All of it—and it may go to 1,200,000 reports a year—is analyzed, collated, filed, kept up to date.

This is background stuff. Upon it the company decides on market possibilities, forecasts sales and development. These include the products' uses in new industries, or as new products in old



Flies His Customers for Sight-Selling Lesson

Ozalid distributor Clarence Finchborn (arrow) is a firm believer that seeing is selling. He was so impressed by the new \$2-million office-factory of the Ozalid division of General Aniline & Film Corp. at Johnson City, N. Y., that he decided his own customers should see it. He chartered a

plane, took 22 engineers from leading industries in Rockford, Ill., flew the 1,000 miles to Johnson City for a tour of the plant.

J. W. Coffman (left), General Aniline vice-president, showed the visitors around. Among other things, he pointed out the company's big paper-sensitizing machine (above).



THE LIGHT BURNS BRIGHT..

The lamp of learning is really getting a polishing these days. More young people than ever before are treading the paths of higher education toward a better way of life.

Wagner is proud of its traditional part in providing power for campuses across the country. Plenty of the "midnight oil" for diligent students is provided through Wagner Distribution Transformers.

Not only do they serve universities and other public institutions, but wherever electric power is used—in industry, commerce, city and farm—Wagner Distribution Transformers can be found efficiently and dependably handling their never-ending job of distributing uninterrupted power for every purpose.

Should you need transformers, or any of the products made by Wagner, consult the nearest of our 29 branch offices or write to Wagner Electric Corporation, 6460 Plymouth Avenue, St. Louis 14, Mo., U. S. A.



ELECTRIC MOTORS • TRANSFORMERS
INDUSTRIAL BRAKES
AUTOMOTIVE PRODUCTS

T47-14



347 NORTON EMPLOYEES RECEIVE SERVICE AWARDS at Annual Party

ON December 6 over 1300 Norton men and women were company guests in Worcester's Municipal Auditorium for the 26th annual presentation of Service Awards:

- 212 — 10 years service
- 47 — 15 years service
- 59 — 25 years service
- 29 — 35 years service

Approximately 10% of all Norton employees have been with the company 25 years or more.

These figures attest to the truth of the phrase so often heard in Worcester, "Norton's is a good place to work" . . . And in the quality of Norton products you get the benefit of this experienced personnel.



dustries. The company also uses reports to put its finger on future business trends.

• **Need for Overhaul**—Shell Oil believes that the bond between production and distribution today lies in marketing research. O. F. Minor, Shell marketing executive, said the greatest future savings in operation will come through overhauling the whole distribution system.

In recent years Shell has followed a policy of consolidating production in its most efficient refineries. But at the same time, it has kept these refineries tied to the company's most profitable areas within low-priced transportation ranges. Result: Several big refineries and several marketing areas have had to be given up. But in spite of that loss, the company is doing 50% more business today than it did 10 years ago—and at a better profit.

Shell also changed its marketing pattern by setting up 11 all but autonomous marketing divisions. Operations and jobs in the divisions had to be formulated first—a year's job.

• **A. & P.**—Earl R. French, national marketing director of Atlantic Commission Co., spoke for A. & P. Atlantic Commission, A. & P. subsidiary, is the biggest handler of fresh fruits and vegetables in the world. That means close coordination between buying, shipping, arrivals, and sales.

Here's how French summarized the company's policies:

DELIVER to consumers foods that keep original quality and freshness.

PREVENT waste and damage.

SUPPLY consumers with the grades they want, the units and varieties that best serve their needs.

PROMOTE high dietary standards through advertising and merchandising of the widest range of foods.


• **Long-Range Trial**—In conjunction with Ohio State University, in Columbus, A. & P. is conducting a long-range produce prepackaging experiment. All produce sold in the area is prepackaged at A. & P.'s warehouse, handled in the stores in refrigerated cabinets. Product losses have been cut by an estimated 20%.

The company has three other experimental packaging shipping, handling programs. They are for Georgia peaches, Louisiana sweet potatoes, and sweet corn in several areas. All are proving the economy of better packaging and handling, better products for the consumer.

• **Revolution?**—Now in its final stages is one A. & P. contest that may prove to be a revolutionary development in food distribution. That is its "Chicken of Tomorrow" contest. Through it, the company hopes to produce the perfect fowl for the market. It has experimented from breeding special strains right through packing, handling, and consumer research to find out what will sell.



The nicest Christmas present I've ever had!

 I was facing my first Christmas alone when I got the letter from my son, Tom. It said that he and Martha and little Jerry wanted me with them for the holidays.

A smaller envelope inside held some tickets and a note. It said, "Here are your train and Pullman tickets—so that you can't say 'no.' We'll be waiting at the station. Love . . . Tom."

I knew then that they really wanted me.



I'll never forget that wonderful trip!

First the kindly Pullman porter placed my bags in a private room. I hadn't noticed the ticket said "roomette."

How I enjoyed that little room of my own, with its gleaming wash-basin, private toilet, clean towels, mirrors—everything I could have wanted—all clean and neat as could be.

How safe and snug I felt as I relaxed and read in my room, while the train clicked off the miles toward the ones I loved. More and more I felt that glad lift of the heart that comes at Christmas time.

And how nice everyone was when I went to the dining car. The attendants were so courteous . . . the passengers so friendly.

That night, before drifting off to sleep, I recalled another phrase in Tom's letter: "Martha is counting on you to make the turkey dressing, the cranberry sauce, and a big mince pie."

It was good to be wanted, and needed, at Christmas!



Next morning, soft snow had begun to fall. With a light heart, I watched it slowly cover the countryside through

which we were passing.

It was going to be a white Christmas!

As we neared the end of our journey, everyone felt the spirit of the season. I was carrying packages tied in bright ribbons. Voices were excited. Every now and then somebody laughed.

Then we were there. Tom's strong arms around my waist . . . Martha's hand in mine . . . little Jerry's wet kiss on my cheek.

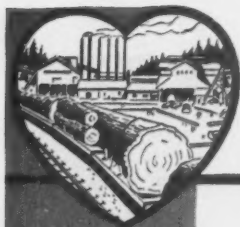
I guess I was crying when I said: "Tom, the Pullman ticket that brought me to you, and Martha, and Jerry, was the nicest Christmas present I've ever had!"

Go Pullman

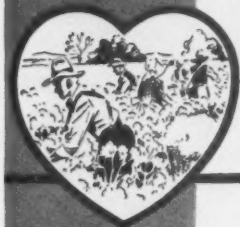
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THE BIG SHOW, where 4-H-Club members took their share of prizes

Industry Rewards Industrious Youth

Big business got together with a melee of youngsters, livestock, spectators, and a mass of assorted exhibits at the giant International Livestock Exhibition in Chicago, last week. Total worth of exhibits: \$5-million.

Feature of the show was the multi-faced display by 4-H-Club members. Nation concerns the country over awarded \$317,000 to the young exhibitors. A sampling of junior contests and their sponsors include



1. MEAT: "Big Boy," champion steer, was sold to Davidson Co. for distribution to hotels. Price: \$8,800 (\$8 a lb.). Contest was sponsored by meat packer Wilson & Co.



2. LEADERSHIP: E. F. Wilson, president, Wilson & Co., sponsors two scholarships



3. FROZEN FOODS: Four winners in contest sponsored by International Harvester



CANNING: From Kerr Glass Mfg. Corp., a scholarship for 3,333 jars of foods

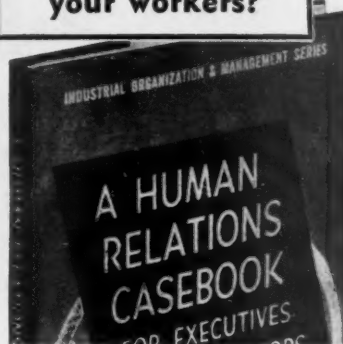


5. SOIL CONSERVATION: Harvey S. Firestone, Jr., makes award for his company



BETTER ELECTRIC METHODS: Six teen-agers get college scholarships from Westinghouse Electric chairman, A. W. Robertson, in Westinghouse-sponsored exhibit

Do you make
these mistakes
—in dealing with
your workers?



- Fail to make the most of the "personal touch"?
- Go overboard in making promises?
- Drive too hard a bargain?
- Pass up the benefits of the other fellow's viewpoint?
- Discourage initiative without realizing it?

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Francis S. Drake and Charles A. Drake

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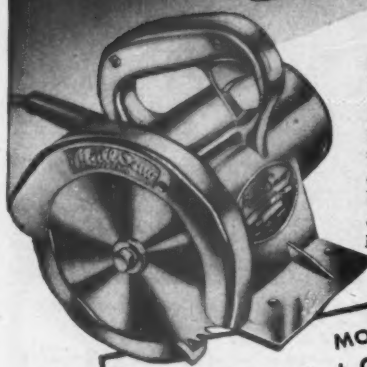
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GENERAL ELECTRIC
Water Coolers

Food Combine

Major Northwest salmon packer to merge with two frozen food firms. It achieves diversification; they get new cash.

Out of the bankruptcy of one of the larger frozen-food packers of the Pacific Northwest has emerged a new combination in the food field. If it goes through, it will link:

(1) The ready cash and half-century experience of Pacific American Fisheries, Inc., Bellingham, Wash., with

(2) The brand name, management and specialized know-how of Cedargreen Frozen Pack Corp., Wenatchee, Wash., and

(3) The facilities of the bankrupt Polar Frosted Foods, Inc., Seattle.

Last May Polar filed a reorganization petition in federal court, listing both assets and liabilities at the same figure, \$3,095,000.

• **Proposal**—Under the plan of reorganization, proposed by Pacific American and Cedargreen, P.A.F. would pay up \$400,000 for an issue of Cedargreen preferred stock. It would also obtain, for an undisclosed sum, enough new issued common stock of Cedargreen to give P.A.F. majority control. Cedar



WHISKER WATCHERS

That five o'clock shadow that turns a maiden's cheek is a social asset at the research laboratories of Schick, Inc., at Stamford, Conn. Engineers arriving in the morning proudly display a fresh crop of home-grown bristle—part of their contribution to the search for new ways to overcome stubble trouble.

Under a testing instrument (above), researchers watch the razors at work clipping the beards at some 8,500 r.p.m. The device seems to stop all motion, thus permits a close look at the shaver's efficiency.

Wyandotte

is now supplying many new

ORGANICS

You already know Wyandotte as one of the world's great producers of inorganic chemicals. The bulk of Wyandotte production will continue in this field so vital to commerce and industry.

You know also that Wyandotte owns vast natural resources in basic raw materials—which can be used in the production of organic as well as inorganic chemicals. For the past ten years, Wyandotte research has been hard at work on this project.

Today, many of these organics are in production—a logical forward step in Wyandotte's \$25,000,000 expansion program for both inorganic and organic chemicals. The list in the next column shows you the wide range of Wyandotte Chemicals. Some of the organics are already being produced, others are planned for the not too distant future. We shall be glad to send you more

detailed information on these organics upon request.

INORGANIC CHEMICALS

Soda ash, caustic soda, bicarbonate of soda, chlorine, dry ice, calcium carbonate, calcium chloride, hydrogen and hydrochloric acid.*

ORGANIC CHEMICALS

Synthetic Detergents: Alkylarylsulfonate type (Kreelox).

Glycol Process Products: Mixed ethylene and propylene glycols, mixed diethylene and dipropylene glycols, ethylene dichloride, propylene dichloride, mixed chloroethers and ethylene oxide.

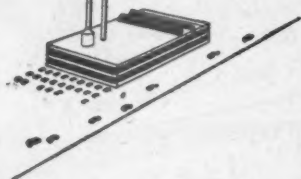
Aromatic Sulfonic Acid Derivatives: Benzenesulfonamide, benzenesulfonchloride, monochloramine B, dichloramine B, benzenesulfonic esters, sodium xylene sulfonate (Naxona), as well as substituted benzene-sulfonamides.

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green would then put up \$400,000 for a new issue of Polar common stock. That would make Polar a Cedergreen subsidiary; a slate of P.A.F.-Cedergreen directors would take control.

Approximately \$1-million in general claims of Polar creditors would be paid off ultimately at close to 50¢ on the dollar—10¢ cash and the rest in new stock. A bank mortgage of \$350,000 would be extended to 1956. Two banks—the Seattle First National and the National Bank of Commerce of Seattle—would take over Polar inventory as collateral to secure loans that total \$1.6-million. Polar's old common and preferred stockholders would be wiped out.

The reorganization plan has been approved by the court. It is now before the creditors, who have until Dec. 17 to take it or leave it. Two-thirds of each class of creditors must approve if the plan is to go through.

• **Salmon Specialist**—Pacific American is one of the large packers of Alaska salmon. It normally packs 10% or better of the industry's total. By the proposed deal, it would break out of the feast-or-famine salmon industry and obtain diversification into other foods through Cedergreen and Polar. Together, these have three freezing plants in Washington and arrangements with other freezers that give them a potential of close to 40-million lb. a year.

WOMRATH SELLS STORES

Last winter Womrath's Bookshops & Libraries, Inc., announced that it would sell ten of its 40 bookstores in the New York City area (BW-Jan.25'47,p58). Last week the company revealed that the sales plan now extends to all its stores. Already 37 have been sold, and the other three are on the block.

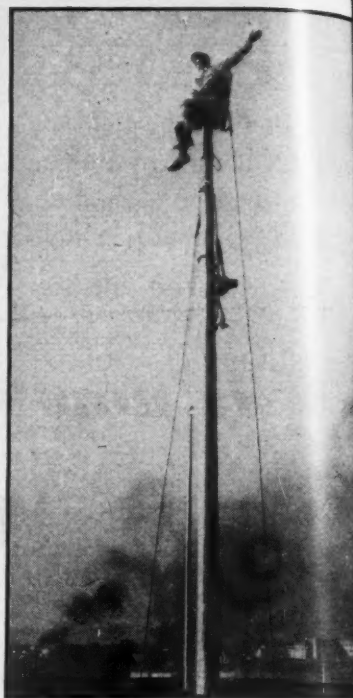
Earlier plans to establish a network of Womrath-owned bookstores throughout the U. S. have been dropped. From now on the company will concentrate on expansion of its lending libraries here and abroad.

The stores that have been sold will keep the Womrath name on a franchise basis. And the stores' lending libraries will get their books from Womrath.

P. S.

Stewart-Warner Corp. raised prices on three console-model radios last week. The company blamed "increased cost of basic materials and production." It promised no further price advances in 1947—which still has nearly three weeks to go.

Retail cigarette prices were advanced 1¢ a pack to 19¢ by New York City chain stores last week. Independents had raised them weeks ago—although



SENTRY FOR SANTA

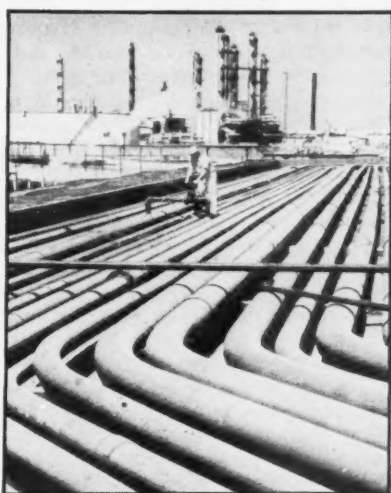
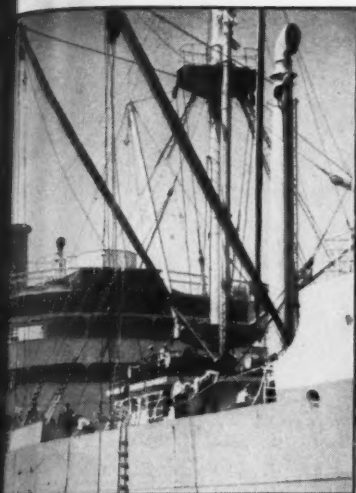
On his chilly flagpole perch on top of the City Hall Annex in Paterson, N. J., a lone sitter kept a stout vigil last week—for Santa Claus. He was there to hail the old saint's arrival in town by helicopter. The Retail Merchants division of the local chamber of commerce paid steeplejack Henry Frechette \$200 for the four-day job. A General Electric blanket, supplied by a local store, kept him warm. A drug store furnished hot coffee; a restaurant sent up basket meals. Through a public address system, youngsters on the ground told him what they wanted Santa to bring.

But the vigil didn't turn out to be non-stop. After the second night, the weatherman predicted a sharp drop in temperature so the chamber of commerce called the flagpole sitter down. The chamber's secretary said that he wouldn't be able to sleep. Frechette stuck to his perch. But next day the undaunted sitter went up again.

wholesale prices had not advanced. Big retailers will boost the product to 20¢ after Jan. 1, 1948, to meet New York State's added cigarette levy to pay for veterans' bonuses. New Jersey cigarette prices after Jan. 1 will be 3¢ below New York's.

The broadcasters code is far from dead, President Justin Miller of the National Assn. of Broadcasters asserted last week in New York City (BW-Nov.22'47,p84). He charged that the press had been unkind and perhaps inaccurate in reporting that the code was through. He suggested that a press code might well improve standards of practice in journalism.

LABOR



5% increase in pay is demanded by C.I.O. ship and dock unions

12% is the frequently mentioned figure for oil union pay demands

? No one will guess now what the rubber workers will ask soon

Smaller Unions Take Lead in Third-Round Drive

C.I.O.'s maritime, oil, and rubber workers may set pattern before big three unions—steel, auto, electrical—start negotiating.

Three important industries were coming to grips this week with C.I.O. third-round wage demands. They are shipping, oil, and rubber. They share the dubious distinction of leading what will be the 1948 parade. Other employers either hope or fear—depending on their circumstances—that, once these wage issues are settled, a national pattern will be pretty firmly established.

The Big Three—That can happen, despite the fact that C.I.O.'s three major unions—in steel, autos, and electrical manufacturing—won't begin negotiating for another three months. To get ready for that event, officers of C.I.O.'s "Big Three" met last week to discuss wage policy and iron out their different ideas.

Their major point of agreement was that a wage hike should be asked without waiting to see what Congress does on price controls. Before, a 1948 pay hike demand had been linked directly to the fight for price rollbacks—if Congress failed to act, said the unions, then labor would have to ask for more money. Now, wage demands will be made on employers, and high prices will be fought on Capitol Hill—but the two campaigns won't be tied together.

Union officers also agreed on coordinated pay drives, a policy of mutual aid, and exchange of full and prompt reports on negotiation progress and plans.

The steel, auto, and electrical union conference followed a meeting of all

C.I.O. vice-presidents on wage policy (BW-Dec. 6 '47, p. 116). It didn't mean, however, that other unions would have to hold back to await a top-echelon setting of wage rate increases.

• **Demands**—Hence, in the maritime, oil, and rubber industry, wage demands are taking shape:

MARITIME NEGOTIATIONS are furthest advanced. Most waterfront and seagoing unions have announced that they want 25% more pay from ship owners and shipping agents. One, the Marine Engineers Beneficial Assn., already is negotiating for 15% more pay plus "fringe" increases. Shipping operators estimate the packaged demand would boost labor costs 30%.

OIL DEMANDS haven't yet been formalized by the Oil Workers International Union (C.I.O.) on an industry-wide basis. But negotiations are under way in refineries on the West Coast, in Texas, and in Ohio. So far, no common figure can be found in these scattered bargaining sessions. Discussions are tightly pegged to local cost-of-living problems. It's significant, however, that oil workers stole the lead for C.I.O. in the 1946 wage drive.

RUBBER WAGE POLICY is still in the discussion stage. The policy committee of the United Rubber Workers (C.I.O.) will meet shortly. How

much the union will ask from rubber's "Big Four"—Goodyear, Goodrich, Firestone, and U. S. Rubber—will depend on this 300-man group from all locals. But U.R.W. has already told employers that a "substantial" increase will be sought.

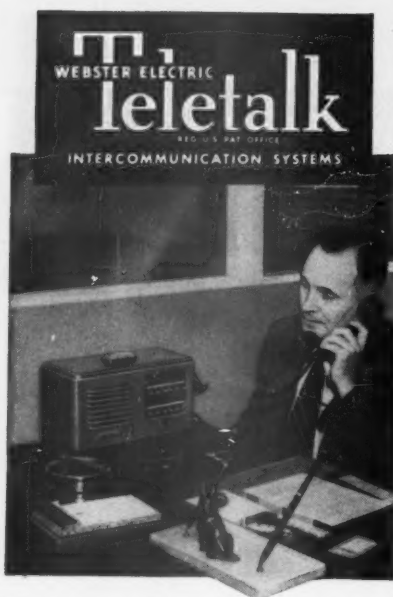
• **Out in Front**—The 12,000-member Firestone local in Akron jumped the gun on an industry-wide demand, and asked for a 12¢ raise. Goodyear, Goodrich, and General Tire Co. locals have asked the international union to reopen their wage clauses. So have a number of other major locals outside of Akron, center of the rubber industry.

Under present contracts, wage clauses can be reopened on a company-wide basis on 60-day notice at Goodyear, Goodrich, and U. S. Rubber. The Firestone contract puts bargaining on an individual-plant basis. So far, the union hasn't decided whether to seek its third-round raise on a "Big Four" basis, or company by company.

Last summer three of the Big Four—Goodyear, U. S. Rubber, and Goodrich—granted their locals six paid holidays a year to forestall pay-hike demands. Firestone also offered its local the concession on holidays but the workers turned down the offer. They wanted a cash raise, and forced the company into wage negotiations.

U.R.W.'s policy committee asked for a 26¢ hourly raise in October, 1946, and settled for 11¢ five months later—on the eve of a threatened industrywide strike. They got 18¢ hourly raises in the first round.

A third-round increase, according to



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U.R.W., is "the only course left open" because "positive action to solve the price problem" hasn't yet been forthcoming from Congress.

● **Added Factor**—Complicating the oil industry's wage situation is the fact that many companies are under cost-of-living contracts—and pay adjustments have been made as the c.-of-l. rose during the year. Even so, it's now obvious that the C.I.O. oil workers' union is laying the groundwork for a new general wage increase demand. Some oil field labor observers are willing to predict the probable demand—12% more across the board.

Standard Oil of New Jersey, which has an independent refinery union, may wind up as the pace-setter for the third round. It has already been asked to discuss an increase in pay.

● **On Sea, at Docks**—An increase for seamen and their dockside allies was declared vital at a recent conference of C.I.O. maritime unions. The marine engineers' demand for from 15% to 30% more—according to whose figures are taken—already had gone to shipping employers. The other unions (most of them with a Dec. 15 wage-reopening date) decided to press for 25%. With the National Maritime Union (sailors) taking the lead, the C.I.O. bloc claimed that soaring living costs and high company profits justify the 25% demand. Significantly, the usually militant seamen issued no strike ultimatum, even when employers said flatly that no raise in wage rates can be considered at this time.

The employers' American Merchant Marine Institute again warned unions that American ship operating costs have become dangerously high. Competition from cheaper foreign-flag—and foreign-crew—ships already is cutting into United States shipping tonnage, employers say.

● **Unemployment Threat**—The unions know this point is valid—and it may temper their demands. They are acutely aware of growing unemployment in seaborne ranks. Competition for jobs is increasing in union hiring halls. In some ports, unions have closed books to new members.

Barring local disruptions which may fit into a left-wing pattern of resistance to U. S. aid to Europe (page 90), shipping employers expect no strikes. At least, they expect no showdown until a hotter issue—continuation of the (closed shop) hiring-hall system—comes up in June.

● **Leather Talks**—Another major wage reopening has just been announced by C.I.O.'s Fur & Leather Workers Union and the Massachusetts Leather Manufacturers Assn. Talks will cover 45 plants directly; they probably will affect 60 other plants under parallel but separate contracts.



Richard T. Leonard

BACK INTO PLANT

Richard T. Leonard was not only voted out as United Auto Workers (C.I.O.) vice-president; he was also ousted as its Ford Dept. head. So now he has gone back to where he started his union career—to a job as spot welder in the DeSoto plant. His pay, as rank-and-filer on a plant job, won't equal his \$8,000 a year as U.A.W. vice-president. Nor will it provide the swivel chair he had as the union's Ford director. But to Leonard it's a step on the comeback trail.

Another defeated U.A.W. vice-president, R. J. Thomas, has taken a job on C.I.O. national organizing staff.



Kenneth Bannon

NEW U.A.W. FORD HEAD

President Walther Reuther's choice to succeed Leonard as head of the U.A.W. Ford Dept. is Kenneth Bannon, 33, a staunch ally. Bannon, the president of Ford Local 400, has a union record as an aggressive officer, and as a good politician.

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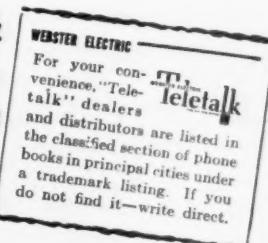
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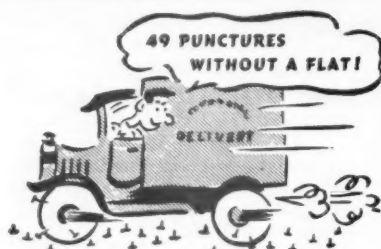
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B.F. Goodrich
FIRST IN RUBBER



UNCONCILIATED: FMCS General Counsel Seitz (left) and Rep. Hoffman

Dispute Over Secrecy

Federal Mediation Service says confidences its men hear bargaining sessions must be kept secret if it is to function. But Rep. Hoffman insists on right to question conciliators on such matters.

The "Joy case" is Cyrus Ching's biggest headache so far in his new job.

When Ching was named director of the independent Federal Mediation & Conciliation Service created by the Taft-Hartley act, it was the first appointment to a federal labor post in years which drew no unfavorable congressional reaction. Ching launched his administration of FMCS in an unalloyed honeymoon atmosphere.

• **Issue**—Already, however, his FMCS has stubbed its toe and fallen into a wrangle with a formidable congressman. The issue is simple: Can the parties in a labor dispute deal privately with a conciliator in complete confidence, or must they be impeded by the knowledge that whatever they have to say to the conciliator may become a matter of public record?

Ching, as his friends would expect, stands firm for privacy as the only basis on which management and labor can get together for successful collective bargaining.

• **Case**—It all arose in a strike involving the Joy Mfg. Co. of Michigan City, Ind., and the United Auto Workers (C.I.O.). Some 400 employees have been out since Aug. 7 in a dispute over wages. Until this week, when they were scheduled to resume negotiations, the company and union had done no bargaining since Oct. 28. What kept them from talking with each other during that period was the attitude of

Rep. Clare E. Hoffman, Republican of Michigan.

As chairman of a House labor committee, the 72-year-old legislator held hearings during October on public line violence in strikes at Clinton Machine & Tool Co., Clinton, Md.; Remington-Rand, Inc., St. Joseph, Mich.; and North Electric Co., Galena, Ohio. Evidence obtained will be part of the House Labor Committee's hearings beginning Jan. 19 on legislation banning mass picketing. Hoffman's hearings on these three cases were authorized by Rep. Fred A. Hartley, Jr., committee chairman.

• **Unannounced**—On his own, however, Hoffman moved into the situation at the Joy Mfg. Co. He heard there had been some violence in the strike. He also heard that federal conciliator Leo K. was bringing the parties together for discussions. Hoffman appeared at the Oct. 28 meeting. His purpose was twofold: (1) to find out about the violence and (2) to get a first-hand look at how FMCS handles its tasks.

In the second objective, said Hoffman, he was acting in his capacity as chairman of the House Committee on Executive Spending. "This committee charged with riding herd on government activities and expenditures," Hoffman explains.

• **Deadlock**—Hoffman's appearance at the bargaining session with a stenographer to record the discussion served

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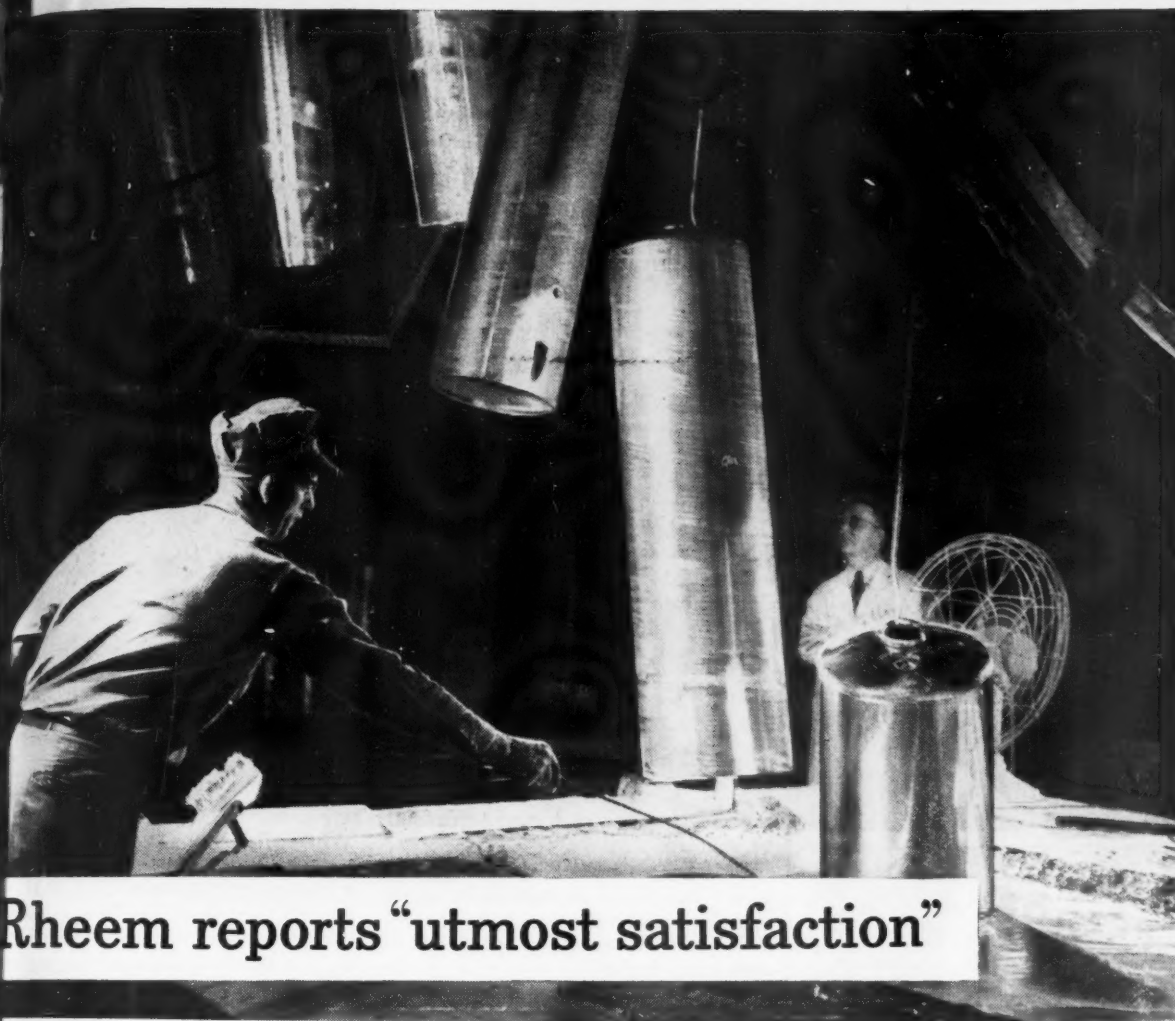
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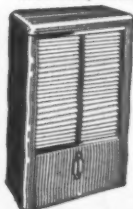
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halt collective bargaining. The union would not bargain under those circumstances. So the meeting broke up.

When he left, the congressman instructed conciliator Kotin not to hold another meeting without first notifying him so that he could be present. Result: no further meetings.

• **Second Case**—Hoffman also collided with FMCS in the Clinton Machine hearings. He subpoenaed federal conciliator Early Greenlee to testify about the strike there. Greenlee objected to giving testimony and was supported by Peter Seitz, FMCS general counsel.

Hoffman lacked Hartley's support on the Joy issue. Hartley is a strong supporter of Ching, does not believe in outside interference with collective bargaining. Last week, finally, Hoffman withdrew his demand that he be present at future bargaining sessions at Joy. Conciliator Kotin then arranged for this week's meeting.

• **Unsettled**—But the dispute over the Clinton case has not yet been settled. Hoffman still wants Greenlee to testify. FMCS still objects. Its position—and that of its predecessor, the U. S. Conciliation Service—has always been: (1) Statements made to or overheard by a conciliator at a bargaining conference are confidential, and (2) effective conciliation cannot be carried on if there is any chance that such confidences will be violated.

FMCS does not object to congressmen being present at conciliation meetings if the parties involved consent. And it is quite willing to furnish congressmen with all the data they want on its activities—except for confidential statements made at bargaining sessions.

That's the main issue still at stake: Can FMCS be forced to disclose confidential statements made to conciliators in the course of bargaining?

OAK RIDGE STRIKE OFF

A strike showdown at the Oak Ridge (Tenn.) atomic energy center was averted this week—at least temporarily. The Gas, Coke & Chemical Workers (C.I.O.) agreed to keep 2,800 members on the job "in view of the critical importance of this project to our national welfare." Negotiations with the Carbide & Carbon Chemicals Corp. will continue.

Key issue for the union is a demand for permanent machinery to handle disputes and grievances. Because of strict controls and secrecy which guard Oak Ridge atomic energy work, usual methods of airing grievances won't work. On the strike eve, C.I.O.'s president, Philip Murray, suggested a solution to the Atomic Energy Commission: Set up a three-sided board of industry, labor, and government members to handle the top-secret atomic labor relations.



AGAINST COMMUNISTS in W.F.T.U. French minority laborite Leon Jouhaux (left) and C.I.O.'s James B. Carey

C. I. O. Speaks Up

Union affirms its stand on Marshall Plan to Soviet bloc
W. F. T. U. Russians avert showdown for political reasons.

For the C.I.O., membership in the World Federation of Trade Unions appears about to pay off—or to blow up.

• **History of Marriage**—W.F.T.U. was formed two years ago. Since then, it has come to be considered pretty much of a Communist-dominated organization. Of its claimed 78-million affiliates, about 46-million are in countries either governed or controlled by Communist leaders. Non-Communist members—such as C.I.O. and the British Trades Union Congress—are heavily outnumbered.

Nevertheless, until recently, W.F.T.U.'s Communist and non-Communist forces had worked together without any big differences. It was a marriage of convenience. The Communist bloc of unions needed C.I.O. and T.U.C. support. For they marked W.F.T.U. as an international labor body, and not just a labor wing of the Kremlin. And on the other hand, C.I.O. looked upon W.F.T.U. as an important vehicle for broadening its international influence as a rival of A.F.L.

• **Opposition**—But last month C.I.O. launched its first active campaign against the Communist influences in W.F.T.U. The issue was the Marshall Plan. The occasion was W.F.T.U.'s executive bureau meeting in Paris. There Russian union spokesmen and satellites in Europe, beating the drums against "American imperialism" in the rehabilitation program, ran head-on into C.I.O.

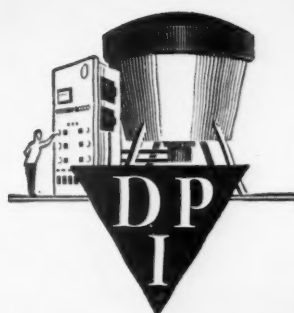
The force of C.I.O.'s opposition

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laboratory-scale, as a pilot-plant operation, or in full commercial-scale production—and for low initial and operational costs.

How many new applications will be found for this process, how many new discoveries it may bring, depends to some extent on *how many new ideas* come along. Our DPI services might help you develop a new and profitable idea—it's happened that way with quite a few processors.

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came as a surprise in W.F.T.U. though the controversial nature of Marshall Plan had been foreseen (B—Nov. 1'47, p90).

• **Salesman**—As C.I.O.'s spokesman the parley Philip Murray chose one of his staunchest right-wingers, James Carey. The C.I.O. secretary-treasurer has followed W.F.T.U.'s twistings and turnings with growing misgivings in recent months. And while he attended the executive bureau meeting ostensibly as a C.I.O. salesman for the Marshall Plan, there was little doubt that his mission was of far greater importance.

It was indicative of a widening crack in relations between C.I.O. and the Russian bloc of unionists.

• **In Plain View**—When Carey took firm stand in support of the Marshall Plan, he forced the cards to be turned face up. W.F.T.U. must revert to original purpose: to coordinate war labor programs. If it does not, the non-Communists may be forced to leave. Carey was not that blunt, but the implication was there.

In a carefully documented address which the Communist bloc in the bureau tried to prevent—Carey called attention to early policy statements of W.F.T.U. A strong note in all these was the necessity of mutual aid for postwar reconstruction of all Europe. And he took up, point by point, Communist arguments against the Marshall Plan, gave quietly effective answers. In his action, Carey had the tactical support of Leon Jouhaux, leader of the non-Communist wing of the French C.G.T. (General Confederation of Labor).

W.F.T.U. talks were held against background of spreading, Communist directed French strikes. To Carey and others in the anti-Communist bloc these were significant: They were a national example of the power politics the Communists would like to use internationally—through a controlled W.F.T.U.

The strikes strengthened the anti-Communists' hand in W.F.T.U. They increased the stature of Jouhaux measurably as the French Communists failed to paralyze France, and finally this week called off their strikes (page 114).

• **No Showdown**—Result: Russians are reluctant to force a showdown with C.I.O. There is a danger, if the showdown comes, that C.I.O. might withdraw. And if C.I.O. does, T.U.C. and other non-Communist unions might bolt too. At a time when A.F.L. is suggesting a "Deminform" of non-Communist European unions, the Russians realize it would be poor strategy to force any showdown.

The issue was placed on the agenda of the next executive bureau meeting to be held early in 1948. But it's probable that no concrete action, one way or the other, will come before the next



AFL's NEW ENVOY to "free and democratic" foreign unions: Frank P. Fenton

world congress—if then. That would mean September, 1948, at the earliest. Meanwhile, C.I.O. is going to carry its fight into all of the 46 countries with labor organizations in W.F.T.U. Carey's message already is going out in bulk lots to European unionists, to combat the propaganda barrage from the Communists' new Cominform.

Potential Weapon—Actually, Russian hesitancy to force a showdown with the C.I.O. is even more significant in the light of a prior event. Just before W.F.T.U.'s Paris session, an important meeting of the Central Council of Soviet Trade Unions (claiming 28-million members) was held in Moscow. Its purpose was to discuss methods of making the work of Communist trade unionists and the new Cominform.

But attention soon centered on W.F.T.U. as a potential weapon in the hands of world Communism. Soviet unionists pledged themselves to fight for this goal, and against "reformist and conciliatory influences" in the W.F.T.U. leadership.

This raised even more concern in C.I.O.'s right-wing bloc than possible bitter opposition to the Marshall Plan. Since C.I.O. took its stand, Soviet unionists have made no further bid for use of W.F.T.U. in their global drive. If they do, C.I.O.'s next challenge will be without gloves.

Importance—There is a sobering importance for both C.I.O. national officers and American business in the present European labor jockeying. C.I.O.'s Murray has been walking a tight rope between feuding leftists and rightists in his organization at home. If C.I.O. fights the Communists abroad, it's soon going to be reflected within C.I.O. in this country. The result may be an extension of the left-right feuding which has disturbed labor relations of many employers in the past.

STEINBERG



No.12 The Mystery of the Two Missing Jools

It seems that each morning Modom used to count the jools in her priceless diamond halter. First she'd count from the clasp at left to the pendant, then from the catch at right to the pendant. If the count was 11 each way, she knew that no jools were missing. . . . How, then, did Hives, the faithful retainer, manage to purloin two of the rocks, yet fix it so that the count was still 11 each way.

Preposterous, it would seem—but obvious once you see it. Far more obvious, in fact, than the "robbery" that's being done today by many a faithful but outmoded lathe.

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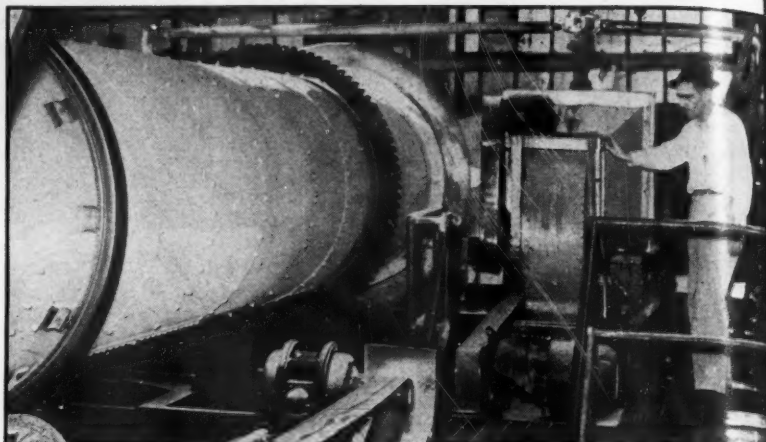


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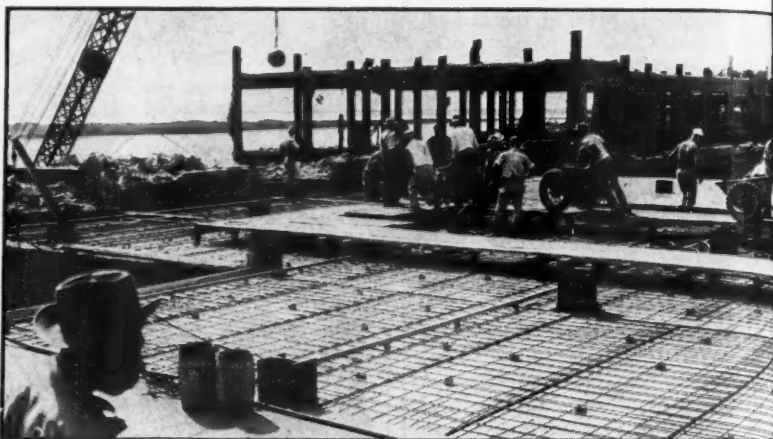
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Monsanto Seeks New Money

Huge chemical company has spent \$50.5-million in past two years on expansion; work now under way calls for an outlay of \$58 million more. Company makes hundreds of different chemicals

In the past two years, Monsanto Chemical Co. has spent \$50.5-million in expanding and improving its diversified chemicals manufacturing business.

To help finance this, it obtained some \$10-million through issuance of preferred stock, another \$30-million through sale of 2.65% long-term debentures to five insurance companies. (Because of tax deductions that this latter type of financing permits, Monsanto figures its net interest is only 1.643%—which is cheap money.)

• **Unfinished Business**—But expansion in any such company is always an item of "unfinished business." Work

now under way calls for an outlay of around \$58-million more. So last week Monsanto was preparing to enlarge its capital still further. It has registered with the SEC an issue of 250,000 shares of \$4 preference stock. This stock will be sold when marketing conditions improve. And it should bring the company another \$25-million.

This money and other corporate funds will go into literally dozens of projects. Typical are these:

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—Nov.3'45,p67) at St. Louis

A chlorine unit and facilities making a synthetic detergent at E St. Louis:

Expansion of Resinox plastic molding compound output at Springfield, Mass.;

A new sulphuric acid manufacturing unit at Everett, Mass. Then, Monsanto is rebuilding the styrene facilities destroyed in the explosion of a shipload of ammonium nitrate at a quay in Texas City, Tex. Monsanto has filed insurance claims totaling \$21,500,000 for loss of life, property damage and use and occupancy coverage.

• **Handsome Returns**—Expansion of operations has produced handsome turns. Total sales for 1947 will be over \$140-million. That's twice the 1942 volume (\$70.6-million), nearly four times that of 1939 (\$38.9-million).

Net income in the first nine months



CHAIRMAN Edgar M. Queeny took over from his father, founder John F. Queeny.



PRESIDENT William M. Rand came
Monsanto when Merrimac joined up

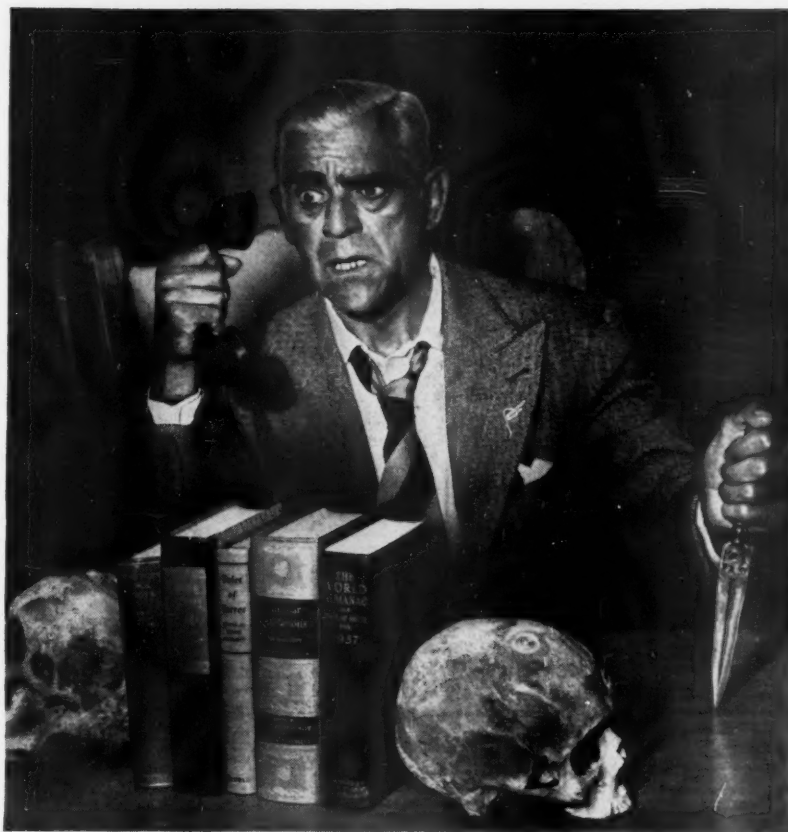
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1947 was \$12.4-million; for the full
1946 it was \$10-million. And in
nine years preceding 1946 the net
ged from a low of \$3.2-million
58) to a high of \$6.7-million (1941).
customers—Monsanto produces liter-
hundreds of different chemicals,
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wood manufacturers, food and pe-
um industries, textile and soap
kers—the list is long and varied.
For example, it makes about half
aspirin in the U. S. But it leaves
others the jobs of pressing the phar-
ceutical into tablets, and of packag-
and marketing the finished prod-
Monsanto's aspirin output is half
million pounds a month.

Try, Try Again—The founder of
Monsanto, John Francis Queeny, prob-
ly could have used plenty of as-
in tablets during his company's first
years. Queeny tried to get into
chemical manufacturing in 1897 while
was employed by a St. Louis drug
tributor. Not until 1907 did he feel
was safe to give up his drug job
devote his full time to Monsanto.
Queeny first tried to organize a firm
refine sulphur. It went up in smoke
en the plant burned down the day
was to start operating. In 1901 he
ed again—this time aiming to make
charin. Germany at that time was
out the only source of supply for
coal-tar chemical.

Saccharin Sweet . . .—Liquid Car-
nic Co. was a large user of saccharin.
Queeny went to its founder, Jacob
uer. Bauer lent him \$3,500, agreed
buy Liquid Carbonic's entire sac-
arin needs from the new company.
Bauer loan, plus \$1,500 put up
Queeny, was the total capital.
The new firm was organized Nov.



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Arsenic, Mr. Karloff? Could you be referring to NP 75013-MFST 221 that passed through SPKNE at 2:12 yesterday morning? It should arrive tomorrow afternoon—and as long as it's on the Northern Pacific, we can tell you its approximate location at any time.

Magic, Mr. Karloff? No, it's NP's famous "Passing Report" Service that thousands of shippers count on for fast, accurate reports on the movement of millions of dollars' worth of fast freight along the "Main Street of the Northwest"—everything from carloads of arsenic (which we actually haul) to fish, fruits, lumber, grain and you-name-it. **HERE'S HOW IT WORKS...**

1. Follow that car! Northern Pacific men at operating terminals check each car in transit each day, report its number, contents, destination to Car Accountant's office in St. Paul. Then...



2. Deadline at 8! Wire reports of previous day's car movements are collected and published daily at 8 a. m. in Eastbound and Westbound editions of the Passing Report...



3. Passing reports and Manifest Records (showing arrival and departure times of NP fast freights all along the line) are wired or airmailed to all NP freight representatives. So...



4. A quick call to your nearest Northern Pacific traffic representative tells you where your shipment is, when it should arrive. Just another reason NP is a mighty satisfactory route for freight.



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211,861 Shares

Union Bag & Paper Corporation

Capital Stock (without par value)

Rights, evidenced by Subscription Warrants, to subscribe for these shares have been issued by the Company to holders of its Capital Stock, which rights will expire at 3 o'clock p.m., Eastern Standard Time, December 16, 1947, as is more fully set forth in the Prospectus.

Subscription Price to Warrant Holders

\$26 a Share

The several underwriters, including the undersigned, intend to offer shares of Capital Stock acquired by them pursuant to the underwriting agreement and through the exercise of rights at prices not less than the subscription price set forth above, and not above a price equal to the sum of the last sale price on the New York Stock Exchange during the current or the previous trading session and an amount equal to the Stock Exchange commission.

Copies of the Prospectus are obtainable from the undersigned only in States in which the undersigned is legally authorized to act as a dealer in securities and in which such Prospectus may be legally distributed.

MORGAN STANLEY & CO.

December 3, 1947.

These securities having been sold, this advertisement appears as a matter of record only and is not to be construed as an offering of these securities for sale, or as a solicitation of an offer to buy, any of such securities.

NEW ISSUE

December 5, 1947

1,007,517 Shares

Phillips Petroleum Company

Common Stock

(No Par Value)

Of the above mentioned shares of Common Stock, 983,507 shares were subscribed for through the exercise of Subscription Warrants issued to stockholders of the Company pursuant to its subscription offer which expired December 3, 1947. The remaining 24,010 shares, to be purchased by the several Underwriters pursuant to the Underwriting Agreement, have been sold by them.

The First Boston Corporation

30, 1901, started making saccharin. In 1902, in a nondescript wooden building on the St. Louis waterfront, Queeny chose the name Monsanto in honor of his wife, Olga Monsanto.

German manufacturers at first supplied Queeny with the necessary chemical intermediates. But they saw in Queeny's efforts a threat to their comfortable position in the American market. So they slapped a limit on the amount of chemical intermediates they would supply to Monsanto.

• . . . Goes Sour—Queeny found a source of supply in Switzerland. Swiss Germans put up their own saccharin plant in New Jersey, began cutting prices. Soon the price plummeted from \$6 a pound to 60 cents. For three years Monsanto teetered on the brink of bankruptcy.

But trouble didn't stop Queeny from thinking about diversifying. He went to Germany to look into the possibilities of producing vanillin. He brought back a young Swiss chemist to help him build a plant to make vanillin. Eventually the young Swiss, Gustav DuBois, became a Monsanto vice-president.

The company also got into the manufacture of caffeine. By expanding its line, improving methods of manufacture, Monsanto in 1905 showed its first profit—\$10,600 on sales of \$111,644.

• Dependence—Before 1914, the American organic chemical industry was most entirely dependent on Germany and Switzerland for its supplies and materials. Even such basic chemicals as chlorine came largely from abroad.

World War I changed all that. Cut off from their sources of supply, American firms had to produce their own chemical intermediates. This meant development of entirely new production processes.

• Logical Steps—So the American chemical industry grew and prospered. Monsanto grew with it. From fine chemicals it branched into the intermediates required in the manufacture of the fine chemicals. The next logical step was into the basic chemicals needed to make the intermediates.

Monsanto had been buying its caustic soda and other chemicals like sulphuric, chlorosulphonic, and muriatic acid. Its supplier was Commercial Acetate Co., just across the Mississippi River from the Monsanto works. In 1919 Monsanto bought that plant. Today it turns out nearly 100 different products, but the heavy chemicals still are its biggest volume items. And the plant has been expanded into one of the largest in the Monsanto group.

• Unique Operation—The chemical industry, especially its organic branch, is a unique operation. In manufacturing one product, a firm will find it has one, two, or a hundred byproducts. A few

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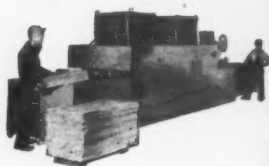
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Thermex Model 10-H high frequency heat generator used for high speed wood-glue bonding. Lord Mountings isolate blower vibration from sensitive equipment.



Below—Lord Vibration Control System in Thermex Model 10-H also includes Mountings for oscillator tube. Complete protection prolongs tube life—cuts operating costs.



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Greater efficiency—longer service life—smooth, quiet performance are obtained in Thermex high frequency heating units by thorough isolation of vibration. Protection of sensitive electronic equipment from vibration is so important that The Girdler Corporation, Thermex Div., specifies a *complete* Lord Vibration Control System in their product.

The Lord Vibration Control System in this Thermex unit provides two-way protection... first, by isolating blower vibration, and secondly—for complete protection—isolating the sensitive oscillator tube from external vibratory disturbances. Four Lord Shear-Type Bonded-Rubber Mountings under the blower and motor assembly prevent its vibration from damaging the oscillator tube. Three more Lord Mountings support the oscillator tube, effectively guarding it against shock and vibration from nearby machinery.

Whether you manufacture electronic equipment or any other product, you can increase your sales by eliminating costly, destructive vibration. It will pay you to consult Lord... make us your headquarters for product improvement through Lord Vibration Control Systems.

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examples from Monsanto's experience. Saccharin is made by oxidizing a chemical bearing the jaw-twisting name of orthotoluenesulphonamide. A product in the manufacture of this compound is another jawbreaker, toluenesulphonamide. For years, para compound was useless. Then chemists got busy. Now it is the for such substances as chloramine, disinfectant and deodorant.

Phenolphthalein is a widely used pharmaceutical. It is formed by condensing thallic anhydride and phenol. Monsanto began making thallic anhydride as a necessary step in its production of phenolphthalein. Today, more than 0.1% of Monsanto's output goes into the pharmaceutical; the rest is used in the manufacture of a host of other Monsanto products.

Chlorine, prime ingredient in countless organic and inorganic compounds, is made commercially by the electrolysis of salt brine. This gives hydrogen as a byproduct. When Monsanto began making chlorine, it used hydrogen to make cyclohexylamine, important as a dyestuff intermediate, as a petroleum additive, as a component of corrosion inhibitors.

• **Inheritance**—In 1928, Queeny turned active leadership of Monsanto over to his son Edgar M. Queeny, then 21. John Queeny continued as chairman of the board until his death in 1933. Under the younger man's leadership, the company has grown from a \$12-million organization to one with assets approaching \$200-million.

This tremendous growth was based on horizontal and vertical expansion. New chemical lines were added; capacity in going lines was raised. Part of this growth was internal; part came about by bringing other chemical firms. Finally, Monsanto was transformed from a close-held corporation to one with more than 16,700 stockholders.

• **Expansion**—In 1929 Monsanto picked up in rapid succession the Rubber Service Laboratories of Akron, Ohio, and Nitro, W. Va.; the Commonweal Division of Mathieson Alkali Works, Newark, N. J.; and Merrimac Chemical Co., Boston.

Of these Merrimac was the most important. It overcame the handicap Monsanto had encountered in serving eastern markets by providing plant facilities in that area. And it brought to Monsanto a group of executives who in some years have held leading management posts. They include William B. Rand, present president, and Charles Belknap, Rand's predecessor.

• **Offshoot**—An offshoot of the Merrimac acquisition was the formation in 1933 of New England Alcohol Co. Merrimac needed a sure supply of ethyl alcohol it used in its process. Monsanto owns 55% interest in New

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land Alcohol, carries out all operat-
and marketing functions. The other
is owned by Central Aguirre
Associates, the sugar company which
applies the molasses from which the
alcohol is made.

Monsanto got into the phosphate
chemical field in 1935: It bought the
ann Corp. of Birmingham, Ala., with
plants at Anniston, Ala., Carondelet,
Mo., and Camden, N. J. Today Mon-
santo offers scores of phosphorus com-
pounds to the trade, uses quantities it
as chemical intermediates.

Two Contributions—In 1936 the
Thomas & Hochwalt Laboratories, Day-
ton, Ohio, was added, made two val-
uable contributions to Monsanto:

(1) The Central Research Labora-
tories was established at Dayton,
designed to carry on long-range and
fundamental scientific study.

(2) A scientist of international note
was brought into Monsanto: Dr.
Charles Allen Thomas. Now executive
vice-president, he was one of the prin-
cipal scientists on development of the
atomic bomb, has been in general charge
of the Clinton Laboratories at Oak
Ridge, Tenn., since mid-1945.

Plastics—Monsanto had long been a
supplier of chemicals for the plastics
industry. It formally entered this field
in its own in 1938 with purchase of
Beroloid Corp., Springfield, Mass. After
acquiring full ownership, it set up
Beroloid as its Plastics Division.

To broaden its plastics line, Mon-
santo bought assets of Resinox Corp.
from Corn Products Refining Co. and
Commercial Solvents Corp. in 1939.
Resinox operations were moved from
Edgewater, N. J., to Springfield. Now
the plastics industry is the company's
largest domestic customer.

Final acquisition came in 1944, when
Monsanto bought I. F. Laucks, Inc.,
Seattle, manufacturer of plywood ad-
hesives. Laucks became the Western
Division of Monsanto.

Foreign Markets—Today Monsanto is
expected to increase its longtime inter-
est in foreign markets. It owns, wholly
or in part, plants in Canada, Great
Britain, Australia, and Brazil.

It is also setting up a plant in Buenos
Aires. This will be a cooperative ven-
ture with Argentinian interests.

Pioneering—New fields of endeavor
are commonplace with Monsanto. It
has formed a Texas Division, to utilize
the hydrocarbon chemicals that can be
made from petroleum and natural gas.

Great things are expected of its devel-
opments for treating fabrics and fibers
—shrinkless wool, "shineless" serge,
longer-wearing cotton and wool.

New markets are opening for its
heat-resisting thermoplastic, for its syn-
thetic detergent (soapless soap), for its
insulating material (Santocel), for agri-
cultural chemicals.

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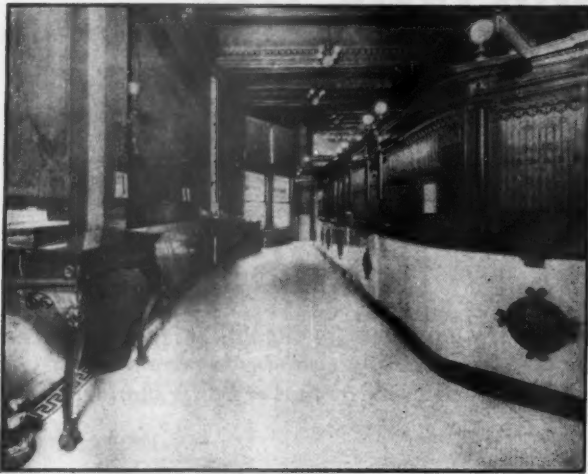
LOUISIANA DEPARTMENT OF COMMERCE AND INDUSTRY

Room 2314

State Capitol

Baton Rouge, La.

The New Look Takes Over the Banks



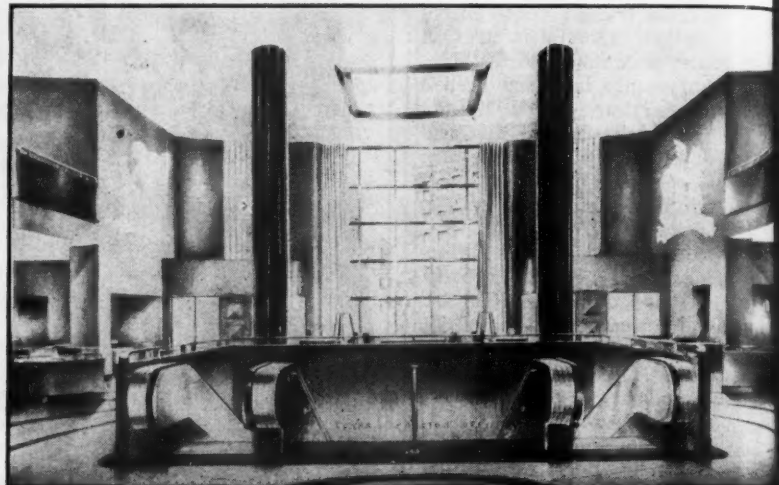
1 OLD LOOK: Before modernization, State National Bank of Texarkana, Ark., was ornate and dark. Marble and bronze gave the interior a cold, mausoleum-like appearance. Most banks have done very little remodeling since the heydays of the twenties.



2 NEW LOOK: Interior is light and airy after Bank Building & Equipment Corp., St. Louis, has finished Texarkana's beautification. Costs are kept low by eliminating expensive materials. Need for more space is a big reason for current construction boom.



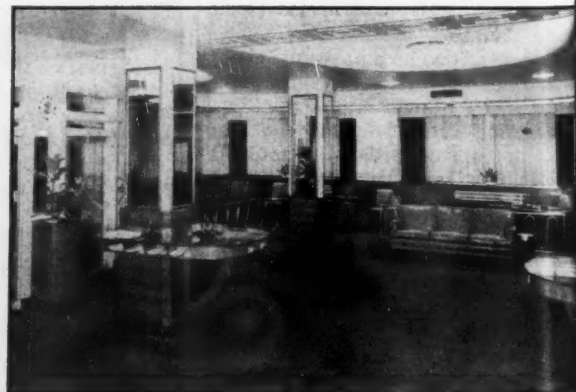
3 CHIEF REMODELER: President of 34-year-old Bank Building & Equipment Corp. is J. B. Gander. His company handles 65% to 70% of U. S. bank construction.



4 SECOND-STORY WORK is a trend which Gander feels is significant. Moving staircases like these installed at the First & American Bank, Duluth, Minn., will bring customers up from the street. High-rent space on ground floors is left for shops. Gander has completed six of these upstairs banks, has plans for a dozen more.



5 DRIVE-IN teller windows save customers a lot of trouble—especially where parking is at a premium. Bank Building & Equipment Corp. built this one for State Savings Bank at Council Bluffs, Iowa. The driver just makes his deposit from the car.



6 COMFORTS OF HOME invite customers into the remodeled Peoples Bank in Canton, Ohio. Over-all carpeting, upholstered furniture, window curtains help create a friendly feeling—a far cry from the awesome aspect of banks designed for the old look.

You're Looking at a NEW METHOD OF WAREHOUSING



'TRAILERS SAVE DOUBLE HANDLING— CUT DISTRIBUTION COSTS' . . .

Says **JOHN T. STANKO**, President
Service Distributing Company, Dayton, O.

WHEN shortages and restrictions made building a warehouse an impossibility, Service Distributing Company made a valuable discovery.

This firm began distributing Budweiser, Weidemann Products, Drewry's Ale and Topaz Beer from Trailers parked on the site of their proposed, new building. These "mobile warehouses" were used temporarily for storage. But, so successful have they proved that plans for the permanent warehouse have been abandoned.

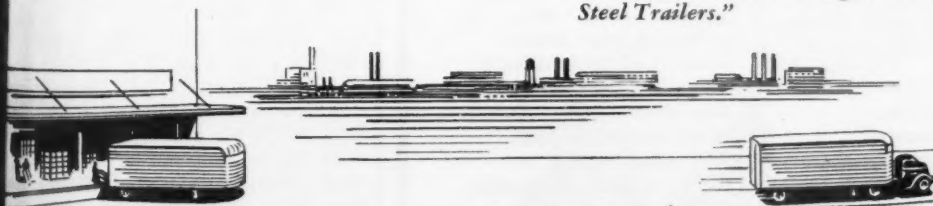
Five Stainless Steel Fruehauf Trailers were put into service. They keep beer rolling into Dayton from Newport, Ky., Chicago, and South Bend. Upon arrival they are parked in the company's lot where full cases are transferred to small city-delivery trucks. Side doors in the Vans permit "empties" to be stacked back into the Vans for return to the brewery.

ONLY 2 TRUCKS PULL 5 VANS

This demonstrates the advantages of the shuttle method. Two trucks keep the 5 Trailers moving. Thus time, fuel, maintenance and operating costs are less—and three trucks are eliminated.

CUSTOMER CITES OTHER SAVINGS

1—Trailers do away with double handling. **2**—Hours for unloading and loading are saved. **3**—Two less handlings reduce bottle-breakage losses. **4**—Permanent warehouse cost is eliminated. **5**—In the words of John Stanko, "Maintenance cost of the Stainless Steel Trailers has been nil to date and with our Gravity Tandems we have had absolutely no tire trouble. Each unit has run more than 25,000 miles and the tires look like new. Frankly, we'd never go back to the old warehouse method as long as we can buy Stainless Steel Trailers."



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| 3. Manufactured Stock Control—
Rough Castings. | 9. Employee-Personnel History Record. |
| 4. Manufactured Stock Control—
Finished Parts. | 10. Wage Employees Earnings Record. |
| 5. Manufactured Stock Control
Finished Parts Reservations. | 11. Maintenance & Service Record Cards. |
| 6. Employees Bond Purchases—
Ledger Record—(Machine). | 12. Contract Cost Ledger. (Machine). |
| 7. Maintenance & I-A-O Agreement Record. | 13. Customer Credit Reference Record. |
| | 14. Perpetual Inventory Control—
Branch Stocks. |
| | 15. Contract Engineering Record. |
| | 16. Order Control Record. |
| | 17. Installation Record—Maintenance. |

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Loans Cost More

Rates for commercial borrowing increase. Bankers Trust leads way in New York; other banks expected to follow soon.

Company treasurers working on 1947 budgets should not overlook an important trend: The day of low interest rates that corporate borrowers enjoyed for so long is over; borrowing costs are going up.

Knowing this, smart treasurers will provide for higher borrowing costs in their new budgets.

• **In New York**—Buyers of new issues in Wall Street aren't the only holders of liquid capital that are asking high money-rental rates. Banks all over the nation are following suit.

Last week, Manhattan's Bankers Trust Co. spotlighted the trend. It announced that starting Dec. 15, the bank's minimum rate on prime, less-than-one-year commercial loans will be 1½%. Its previous rate (1¼%) had been the basic "New York rate" since 1935.

Even before this, Bankers Trust and other big Wall Street banks had raised their rates on other classes of loans:

Rates on loans to security dealers against

U. S. government bonds due within a year are now 1% instead of ¾%.

On loans secured by longer-term Treasuries, the rate has been raised from 1¼% to 1½%.

Loans secured by other than government securities now cost borrowers at least 1¼%. Before, many such loans cost only 1¼%.

Rates on bankers acceptances have also been boosted. The National City Bank rate for 30- to 90-day acceptances, for example, is now: 1½% but 1¼% asked. Until recently the rate was 1% bid, 15/16% asked.

• **Other Cities**—This trend is also noticeable in other cities. In Buffalo, for example, rates have been upward bound for several weeks. A flood of loan requests sent bank borrowing there to a new high. The Buffalo bank still let borrowers of unquestioned credit-standing have money at the 1¼% level, which has prevailed for years. But even this is expected to rise to 1½% soon. Meanwhile, the Buffalo bank have raised rates sharply for other loans.

Philadelphia banks have also followed the lead of New York. They have raised their acceptance rates by ¼%-½% and they are expected to raise their loan rates on prime paper from 1¼% to 1½% very soon.

• **Commercial Paper, Too**—Rate changes in the commercial paper market are

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IN AIRCRAFT

Cessna Aircraft Industries Assn. of America has named a young man—36-year-old Dwane L. Wallace—as chairman of its Personal Aircraft Council. Wallace got off to an early start. He became head of Cessna Aircraft Co. in 1934, has held the job ever since. A look at his company's report for the year ended Sept. 30 helps explain the council's choice. It shows the biggest earnings since the war—\$371,965 compared with \$296,443 the year before. This makes Cessna one of the few plane builders making a profit.

Another proof of the over-all upward trend.

Commercial paper brokers report that the going rate in that field for 90-day to six-month unsecured notes backed by prime credit risks is now 1½%. For notes of lesser known open-market corporate borrowers the rate is 1¾%. Only recently, prime paper with a 10% return could be sold easily.

Reaction?—Up to early this week, no other big city bank had followed the lead of Bankers Trust. But unless signs appear that Bankers Trust jumped the gun, many banks may soon follow suit. Behind the Bankers Trust's decision to slash out the path toward higher rates, are several factors:

- (1) The shortage of reserves held by banks in the area, plus the recent increase in short-term government rates.
- (2) The sharp boost in bank operating costs since V-J Day.
- (3) Return of the supply-demand factor in corporate loans.

The Pictures—Press Assn.—19, 28, 76, 79, 88; Int. News—23, 79; Acme—58, 59, 62, 80, 82, 85, 86, 90, 113; Rode Photo Service—24; Ford Motor Co.—46; Harris & Ewing—85; Reni Newsphotos—88; Blackstone Studios—93; Times Studio—113; Sovfoto—117.

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THE MARKETS

U. S. Gold Hoard Grows

Treasury's holdings approach new peak as other countries' desperate need for goods keeps yellow metal flowing here. Inflationary effect has government fiscal officials worried.

All the laws of classic economics seem to be working in reverse these days. That's one of the things driving security and commodity traders off their heads. The old rules as to what's bullish and what's bearish don't mean much in present markets.

• **Case in Point**—Take the case of gold movements, for example.

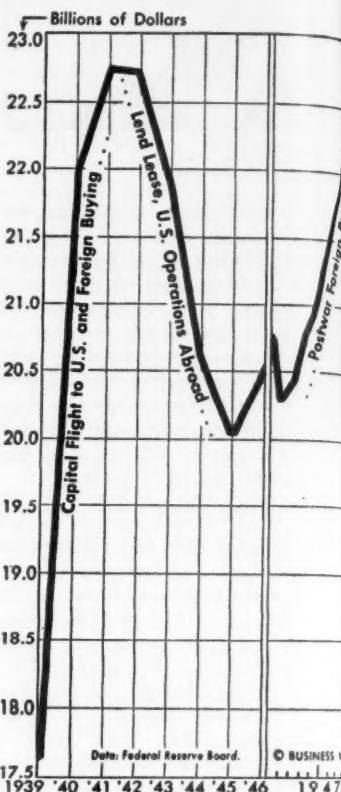
According to orthodox economics, inflation drives gold out of a country. Bank reserves shrink; money gets dearer; eventually prices have to turn down.

But in the past year, the faster prices have gone up in the U. S., the faster gold has poured in. Last February the U. S. gold stock stood at \$20.3-billion—about \$2.5-billion below the prewar peak of \$22.8-billion in 1941. By the end of November, it had shot up to \$22.7-billion, only a shade under the previous high. And it's still climbing.

• **Inflationary**—This inflow of gold adds to bank reserves and broadens the whole credit base of the country. It partly counteracts the efforts of the Federal Reserve Board to restrict commercial lending. Its general effect on prices is inflationary. So, for the stock market, it's bullish.

But the sight of all this gold flowing in—when we already are suffering from an embarrassment of that particular kind of riches—was one of the things that made the Administration come out for a program of tighter credit controls. And that's bearish.

• **Boost Bank Reserves?**—Marriner Eccles, chairman of the Federal Reserve Board, cites the gold inflow as one of his main reasons for proposing additional reserve requirements for member



U. S. GOLD STOCK soars, after wartime slide, as other countries ship gold to pay for purchases of goods and food

banks. This week he predicted another \$1.5-billion to \$2-billion of gold inflow next year.

Congressional Republicans don't think much of Eccles' proposal for additional reserve requirements. But gold imports bother them, too. One idea that they are considering is an increase in the gold backing required for Federal Reserve Bank notes and deposits.

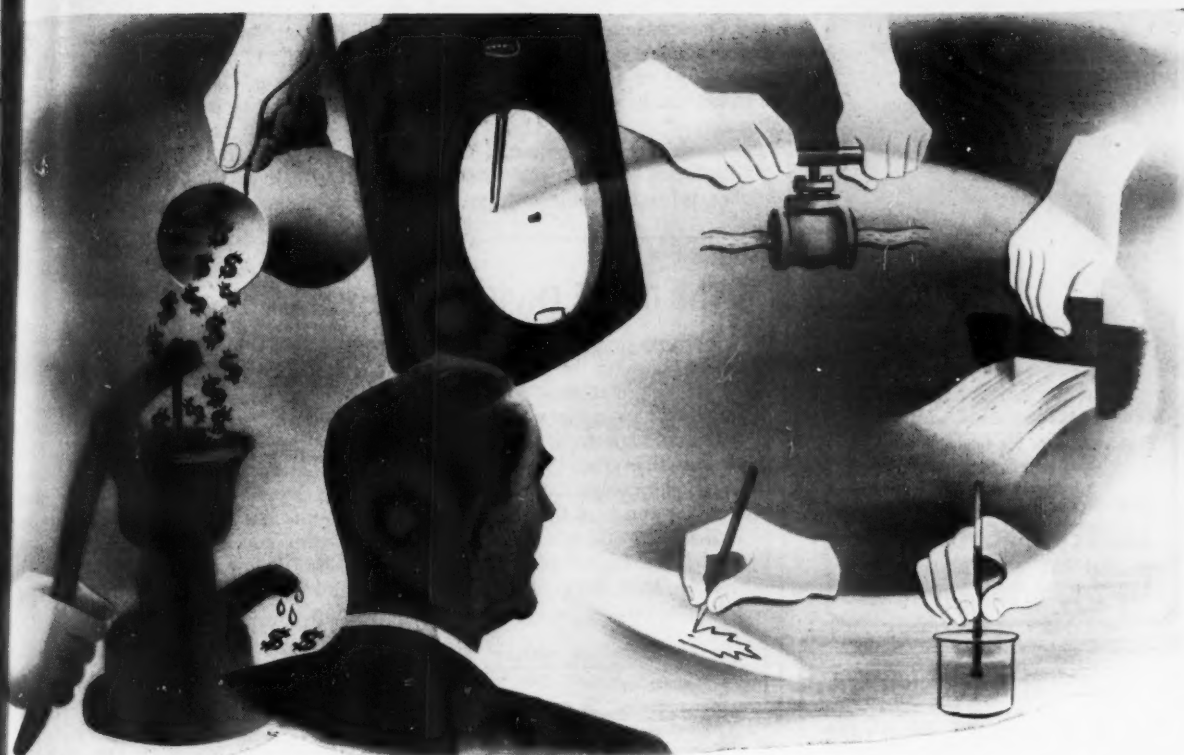
The Treasury is playing with the idea of reviving the gold sterilization program that it used in 1936 and 1937. Under this plan, the Treasury would offset the effects of gold imports by selling special bonds to the banks and transferring the proceeds to an inactive amount.

• **International Echoes**—Meanwhile Treasury experts are reading the riot

Security Price Averages

	This Week	Month Ago	Year Ago
Stocks			
Industrial	146.9	149.7	151.6
Railroad	39.9	40.6	40.7
Utility	66.1	66.7	71.4
Bonds			
Industrial	119.4	119.7	120.5
Railroad	104.3	104.8	105.7
Utility	114.6	114.7	114.9

Data: Standard & Poor's Corp.



Pump Priming or Process Perfecting?

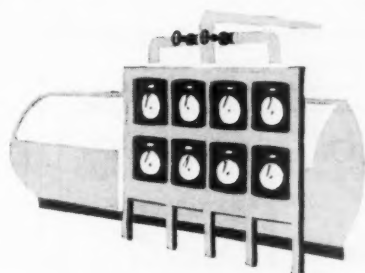
to keep your profits flowing

you are concerned about profits
going up — and tempted to dip into
reserves — find out what process-
perfecting can offer you before making
your next move. More than likely you
can fully solve your problem through
modern instrumentation applied to its
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to financial representatives of the Canadian government. Canada has just proposed a scheme for paying gold mines an extra \$7 an ounce for additional production. If it works, this will increase the flow of gold to the U. S. And even if it doesn't work, it will start the U. S. gold mining companies yelling for a higher price for their output.

A quick look at the Canadian situation explains why gold keeps coming into the U. S. in spite of the way prices have risen. The Canadian government is willing to pay a bonus for extra production because it can use gold to buy goods that it must have from the U. S. It would lose \$7 an ounce, but will take the loss to get the goods.

The 1947 Dividend Flood—A Sampling

Fourth-quarter dividends have been coming up to earlier optimistic expectations. Full 1947 payments now appear headed toward a record peak—as much as 20% more than the 1946 total. Industrial companies have been making by far the best showing. Over half of those companies sampled below paid out higher dividend totals in 1947 than they did in the 1929 boom-year.

Dividends this year, however, probably won't take so much as 45% of available earnings. In other abnormally high earnings periods, they have taken about 60%. This fact is already causing stockholders to complain. They forget that boom-time sales greatly inflate accounts receivable and inventories. Thus companies must keep an above-average working capital position.

"Boom Year" Dividend Payments (Adjusted for stock split-ups, etc.)

Company	1928	1929	1936	1937	1946	1947
Allied Chemical & Dye.....	\$6.00	\$6.00	\$6.00	\$7.50	\$8.00	\$9.00
Allis-Chalmers	1.62	1.81	1.50	3.50	1.60	1.60
American Can.....	2.00	5.00	6.00	4.00	3.00	3.00
American Smelting & Refin....	2.66	4.00	4.05	5.00	3.00	5.00A
American Tobacco "B".....	5.00	6.25	5.00	5.00	3.25	3.50
Anaconda Copper	3.50	6.75	1.25	1.75	2.50	3.00
Bethlehem Steel .....	.....	3.50	1.50	4.00	6.00	6.00
Briggs Mfg. ....	.....	.....	4.00	4.00	2.00	2.00
Caterpillar Tractor	2.60	3.00	2.50	2.00	3.00	3.00
Chrysler Corp.	1.875	1.50	6.00	5.00	1.50	2.875
Douglas Aircraft	B	.....	.....	.....	7.50	2.50
Eastman Kodak	1.60	1.60	1.35	1.50	1.40	1.55
Endicott Johnson	2.50	2.50	1.50	1.50	1.50	1.575
General Electric	1.25	1.50	1.70	2.20	1.60	1.60
General Foods	2.75	3.00	2.25	2.00	2.00	2.00
General Motors	3.80	4.30	4.50	3.75	2.25	3.00
Glen Alden Coal.....	10.00	10.00	1.50	0.50	2.00	2.00
B. F. Goodrich.....	4.00	4.00	1.00	1.00	4.50	5.00
International Harvester	1.50	2.50	2.50	4.00	3.00	3.65
Johns-Manville	1.00	1.00	1.42	1.55	1.17	1.63
Kennecott Copper	2.63	4.50	1.70	3.50	2.50	4.00
Kimberly-Clark	0.31	1.25	0.50	1.00	1.00	1.30
Kresge	1.60	1.60	1.55	1.20	2.50	2.25
Loew's, Inc.	1.00	1.00	1.17	2.50	1.50	1.50
Lone Star Cement.....	4.00	4.00	2.50	3.75	4.00	4.25
National Biscuit	2.80	3.00	2.00	1.60	1.20	1.50
R. H. Macy.....	4.25	3.00	2.00	2.75	2.60	2.20
Pacific Mills .....	.....	.....	0.50	0.75	2.37	3.00
Pullman, Inc.	4.00	4.00	1.50	2.75	3.00	3.00
Reynolds Tobacco "B".....	2.60	2.55	3.00	2.85	1.75	2.00
St. Joseph Lead.....	3.00	3.00	1.00	2.50	2.00	3.00
Sears Roebuck	0.62	0.62	0.94	1.37	1.75	1.75
Standard Oil of Cal.	3.00	2.50	1.20	2.00	2.30	3.20
Standard Oil of N. J.....	1.50	1.87	2.00	2.50	3.08	4.00
Swift & Co.	2.00	2.00	1.85	0.90	1.90	2.10
Texas Co.	3.00	3.00	1.00	1.50	2.50	3.00
Timken Roller Bearing.....	2.62	3.00	3.75	5.00	1.875	3.00
Underwood Corp.	5.00	4.25	2.87	4.50	2.50	4.00
Union Carbide & Carbon.....	1.00	1.30	2.30	3.20	3.00	3.75
U. S. Gypsum.....	1.60	1.60	3.25	2.50	3.00	4.00
U. S. Steel.....	7.00	8.00	.....	1.00	4.00	5.00
Westinghouse Air Brake.....	2.00	2.00	1.12	.....	1.75	3.00
Woolworth (F. W.)	2.00	2.70	2.40	2.40	2.10	2.50
Wm. Wrigley, Jr.	3.50	4.00	4.00	4.25	3.00	3.00

A—Plus 20% stock dividend. B—Organized 1928.

INTERNATIONAL OUTLOOK

NESS WEEK

BER 13, 1947

SERVICE

Moscow has made its expected retreat in France (BW-Dec.6'47,p119).

So Stalin may not risk the same kind of showdown fight in Italy.

Perhaps he's figuring, as Washington is, that Premier de Gasperi could deflate a general strike as neatly as did French Premier Schuman (page 114).

It's a good thing for the Russian dictator to learn that you can burn your fingers even in a cold war.

But don't discount the damage the Communists are doing in Europe.

Production losses in France include more than two weeks' output of coal, steel, and motor vehicles. And the strikes have also given a boost to inflationary pressures

So it's more important now than ever for the Schuman government to produce a remedy for runaway food prices.

If Schuman can't solve this problem, there's sure to be more labor trouble in France later this winter. And non-Communists will support, not oppose, these strikes.

This would leave France no alternative but a strong-arm government under de Gaulle.

As a reprisal for Schuman's bold stand, Moscow has called off the trade talks with Paris (BW-Nov.15'47,p108).

This won't make the French food position any easier.

French negotiators expected to get a minimum of 300,000 tons of Russian wheat in return for dyes and textiles.

Don't be misled: The fact that the London meeting of foreign ministers keeps going on doesn't mean it's getting anywhere.

All Marshall got from his ultimatum to Molotov was a break in a deadlock on procedure. (Molotov agreed to talk about German economic unity without prior settlement of the reparations problem.)

The Soviet Foreign Minister just isn't interested in getting Germany out of the doldrums.

He gave way on procedure to avoid blame for a conference breakup. This would have jeopardized his plans for a propaganda campaign in Germany after the conference.

Now Molotov will stall again. He aims to get Marshall or Bevin so disgusted that they will call the whole thing off.

If this happens, Washington and London will push plans to make Bizonia in western Germany pay its way.

Currency reform is definitely in the wind. So is a scheme to bring France in on a trizonal setup.

The discussions on Trizonia will be held next spring in London or Berlin. This will be a job for technical experts, not foreign ministers.

De Gaulle may be the chief threat to a smooth-running Trizonia.

John Foster Dulles, Republican adviser to Marshall at London, found this out on a week-end visit to Paris.

The de Gaullists are still bent on keeping German industry weak.

If de Gaulle comes to power, the French veto would be wielded often;

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

DECEMBER 13, 1947

perhaps as often as the Russian veto is now used in the four-power control in Berlin.

You can expect the Soviet propaganda machine to slap back at the "Voice of America."

Last week the State Dept.'s overseas mouthpiece reported a buying panic in Moscow.

Now the Kremlin is set to tell the world that all is well in Russia.

It will soon announce abolition of rationing, reduced prices, a stronger currency.

The official reasons for Russia's "good fortune": (1) a bumper food crop; (2) increased production of consumer goods; (3) higher than prewar output in coal, copper, aluminum, nickel, power, tractors, and machine tools.

Moscow is also exuding confidence about current talks on four important trade deals—with Britain, Sweden, Belgium, and Norway. If the deals come off, the Russian people will be told that the U.S.S.R. gets a double payoff: (1) industrial goods in exchange for wheat, etc.; (2) weakening of U. S. influence.

The British are getting a breather from Washington's release of the last \$400-million of the U. S. loan.

Since withdrawals were frozen in August, London has sold \$412-million from its gold reserves. The British Treasury has also borrowed \$240-million (in dollar exchange) from the International Monetary Fund.

The U. S. Treasury wasn't just making an open-handed gesture in unfreezing the money.

The move will put financing of German trade on a more solid basis.

Also, some of the dollars will be passed on to other countries to pay for U. S. exports. Reason: London has reinstated limited convertibility in its trade with Belgium, Sweden, Portugal, and the Argentine. In other words, the British will make up current trade deficits in dollars.

The catch is that the \$400-million will be used up by the end of January.

Then London will have to draw again on its reserves. And they won't last long unless the European Recovery Program comes to the rescue.

Pepsi-Cola Co. is the latest U. S. concern to set up shop in the Union of South Africa (BW-Nov.29'47,p81).

Pepsi-Cola will build six plants in the Union. One plant is now under construction at Cape Town. Planned expenditure totals \$1.2-million.

American know-how, as well as capital, is playing a big role in the Union's industrialization.

Hydrocarbon Research, Inc., is supplying technical advice for construction of a \$55-million oil-from-coal plant. Anglo-Transvaal Consolidated Investment Co. is building the plant at Vereeniging.

Both the U. S. and Canada are getting cut in on new orders from the South African Railways.

Canada Car & Foundry Co. has a second contract for 2,000 railway trucks (BW-Sep.6'47,p100). This should bring Canada Car close to \$10-million.

U. S. Steel and Bethlehem are splitting a \$4-million order for 20,000 pairs of wheels and axles.

BUSINESS ABROAD



MONROVIA NEEDLETRADES typify Liberia's backward state, which Liberia Co. hopes to change

Liberia: Into the 20th Century?

Set up by U. S. capital, Liberia Co. is aimed at developing the nation's rich, unexploited natural resources. Liberian legislature gives the firm concession rights to run for 80 years.

The twentieth century will soon get its first, long-delayed crack at Liberia. Plans have been made by the newly formed Liberia Co. to open up this potentially rich but almost untouched West African republic.

The Liberia Co. is a \$1-million corporation set up by a group led by Ed-

ward R. Stettinius, Jr. This organization, just chartered by the Liberian legislature, will virtually take over the country's economy. Under concession rights that run for 80 years, it aims to bring in some \$10-million in American capital over the next few years for the development of agriculture, mines, and other natural resources. It will establish a bank, transportation, communications, and other public utilities.

• **Importance to U. S.**—The ambitious Liberian scheme has two important angles for the U. S.:

(1) The country has great strategic value. The U. S. found this out during the war, when Liberia became a major source of natural rubber as well as a transatlantic airways link. A Foreign Economic Administration mission began a five-year survey of resources. Recently the U. S. Navy has tacitly recognized the strategic importance of Liberia; it supervised construction of a deepwater harbor at the capital city of Monrovia. This is being financed by about \$20-million in postwar lend-lease funds.

(2) Liberia should become an important supplier of agricultural and mineral products. The bulk of these should go to the U. S. Liberia Co.'s president, Blackwell Smith, thinks that "in our



lifetime" exports might run as high as \$100-million a year. He expects that in 20 years' time Liberia may be producing 200,000 to 300,000 tons of cocoa per year; this would be about as much as the Gold Coast. If it works out, Liberia will break Britain's stranglehold on West African cocoa. And Liberia should also become a sizable producer of iron ore and diamonds.

• **Purpose**—The role of the Liberia Co. in the country's economy is that of a catalytic agent. Its main purpose is to attract American capital and know-how into Liberia to develop the natural resources.

Liberia Co. has exclusive exploration and development rights for the whole country, except for rubber and iron ore. It will set up separate affiliates to handle



LIBERIA CO.'s Blackwell Smith, looks for a "Gold Coast" in African republic

PARIS LETTER

PARIS—The city of light, as this is written, is a city of shadows. Lights, in the early evening, come on only intermittently in streets and houses. Uncollected garbage litters the sidewalks. The subway is not running, and in the freezing darkness crowds mass glumly to wait 40 minutes or an hour to get a bus for home. Squads of police outside the National Assembly flap their arms and stare dully from frostbitten faces, while inside the Communist deputies encamp themselves around the rostrum.

THE STRUGGLE here goes far beyond the confines of Paris or of France. Since Andrei Zhdanov laid down the new Soviet line for Europe in October, French Communists have used every means in their power to turn the French people against the Marshall Plan.

But their propaganda offensive failed. Not even the working class could swallow the new line. American aid is too obviously necessary. And the C.I.O.'s support of it reassured French workmen that U. S. help would not be just "a tool of Wall Street to dominate France," as the Communists charged.

So the Communists played their trump card and used their control of the French labor movement to call the workers out on strike, first locally, then on a national scale. They planned to paralyze the country this way (BW—Dec. 6 '47, p119).

Most Frenchmen agree that the Communists hoped to discredit the French government by these strikes and perhaps to lure General de Gaulle into an attempted coup d'etat which would turn all French democrats against him. They hoped to convince Americans that France is too far gone to help.

BUT THE FRENCH Communists had another reason for calling the strikes. They were beginning to lose working-class support and figured that a policy of super-militancy was needed to win back the lost ground.

The new policy can be summed up as follows: "We must no longer cooperate with other liberal and left-wing groups. There is no hope of our getting back into coalition

governments. We must concentrate our effort more completely on the working class. We haven't given them dynamic enough leadership. The way to lead them is to give them action!"

This is the gist of the most significant passages in the speech of Maurice Thorez, leader of the French Communist party, to its Central Committee on Oct. 29.

At the beginning of 1947, the Communists held 80% of the offices in the General Confederation of Labor (CGT) and that organization counted 6,400,000 members, an all-time high.

But workers became more and more conscious this year that their share in the national product was declining. So dissident groups called major strikes—communications, railways, at the giant Renault auto plant, Paris transport. The Communist leadership hopped on the bandwagon, but its purpose was too obviously political.

Several groups meanwhile seceded from the CGT. Anarcho-syndicalists formed a separate federation and gained considerable strength in the building trades. The Catholic trade union federation continued to grow and now counts 900,000 members. Leon Jouhaux finally organized the Socialist opposition within the CGT. Then CGT unionists began to refuse to pay dues.

THE COMMUNISTS seem to have guessed wrong about the French working class. Their tactics—refusing to negotiate before striking, refusing the government's offers, opposing secret strike votes, and politicalizing the CGT—have lined up against them not only the increasingly well-organized union opposition but probably also a majority of the workers.

Sabotage and acts of violence can't disguise the fact that the Communists are fighting a losing battle. The government deserves a lot of credit for its firm action in calling up 80,000 Army reservists and pushing through a law guaranteeing the right to work. But it is working-class disgust with Communist tactics which is really defeating the Kremlin's "Fifth Column" in France.

its various projects. One affiliate handle lumber, another airways, and diamonds, etc. Stock in these firms be held jointly by Liberia Co. and participating firms. The portion of held by each will be a matter of trading to suit each case.

Liberia Co. has already contracted with Virginia Engineering Corp. to do construction work. And it has blueprints for a trading company which will keep carefully under its own wing. This should pay off well if the coffee, and similar projects go through.

• **Financing**—Where it can't get private backing for such projects as roads and communications, Liberia Co. plans to ask the Export-Import Bank and World Bank for loans.

As to the public utilities, Liberia intends to hand most of them over to the Liberians when they can take over them on their own hook. The Liberian government will probably get a bank, since it is to be a bank of roads and communications will probably go into the government's hands too. The airline, however, will probably be passed on to private Liberian hands.

• **Overtone**s—In some ways Liberia resembles the International Basic Economy Corp., Nelson Rockefeller's operation in Latin America (BW—Mar. 17, p17). Like it, Liberia Co. has heavy socio-economic overtones.

The holding company behind the Liberian operation is Stettinius Associates—Liberia, Inc. This parent organization is handing over 10% of the stock in Liberia Co. to the Liberian Foundation, a new philanthropic organization which will develop health, education and social services. It is also handing over another 25% to the Liberian government. This means that the Liberians themselves will be guaranteed a slice of Liberia Co.'s profits.

• **Crops**—Liberia is one of the few remaining countries which has not been developed either by its own inhabitants or by foreign enterprise. Just how undeveloped it is no one knows. Even its population is guesswork. Somewhere between 14-million and 2-million people live in its 43,000 sq. mi. of luxuriant West African country.

Practically everything tropical grows there—notably rubber, piassava (a fiber), lumber, rice, cassava, coffee, sugar, oil, palms, cocoa, fruits, cashew, and cola nuts. But rubber is the only significant commercial crop today. In 1919 Firestone Tire & Rubber Co. started famous rubber plantations, that now have 10-million trees on 80,000 acres of land. Thanks to Firestone, rubber provided Liberia with almost its entire export trade, which reached a record of \$12-million last year (prewar exports were about \$2-million). Gold, piassava, and a scattering of other items accounted for

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This year railroads expect to average less than 3% on their investment. But even this will not be clear profit. Out of it railroads must pay interest on borrowed money, rentals of property and equipment, and must provide for needed improvements. Most people think a return of 6% would be no more than fair—and experience has shown that railroads need 6% to keep their plants and equipment abreast of the times.

Why are railroads faced with this situation? Here's why. Since 1939 railroad wage rates are up more than 67%... costs of materials and supplies are up 87%. But increases in freight and passenger charges authorized by the Interstate Commerce Commission have not come anywhere near offsetting these skyrocketing costs.


So, in spite of handling a record-breaking peacetime traffic with an efficiency which has set new transportation records, railroads are faced with the grim reality that their earnings are far short of their needs.

The plain fact is that in order to continue to give the nation the transportation service it demands, railroads must be allowed to charge enough for their freight and passenger services to enable them to earn a return comparable to that earned by other progressive, self-supporting private enterprises.

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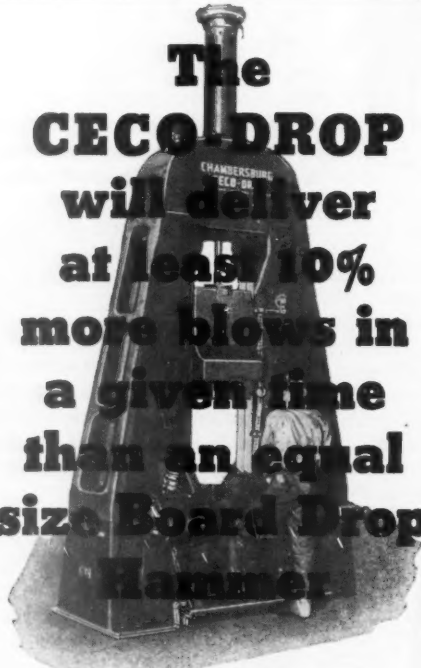
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• **Mineral Resources**—Experts that Liberia's stock of minerals the profusion of its plant life. gold is now taken out of the ground the country is known to have deposits of iron, zinc, platinum, and manganese. Surveyors are sure that important mineral finds will be made in rock formations that cross the border of Leone, diamond-rich British colony to the northwest (map, page 113).

A start has already been made in iron. Last year the Liberian government granted a concession to a New York company, the New York Iron & Steel Co., to develop an area near Monrovia. These deposits are thought to contain from 300-million to 500-million tons of high-grade ore, possibly 200-million tons of lower-grade ores.

• **Backwardness**—Despite all this, Liberia remains a backward, poverty-stricken country; it's disease-ridden and uncharted. A mere 60,000 or so inhabitants living on the seaboard are civilized, by U. S. or European standards. The country has no railroad, most no roads, only a scattering of schools.

For more than a century Liberia has been dominated by the descendants of freed Negro slaves who went there in the U. S. after 1822. Exactly a century ago these few thousand emigrants established the Free & Independent Public Republic of Liberia, closely modeled after the U. S. Since that time, however, the 99% of Liberia's population—indigenous tribes—have had little chance to learn about freedom. In the 1930s Liberia was the subject of a League of Nations report on slavery.

• **Crop Projects**—So far, cocoa is the most advanced of all Liberia Co.'s individual projects. Here the company has the help of the American Cocoa Research Committee in working out marketing and growing programs. It estimates that present seed stock will be producing in quantity in about 5½ years. Initial target is a 50,000-ton annual crop in 10 years' time.

In putting the country's agriculture on its feet, the company will rely on small farmers. It will not encourage large, foreign-owned plantations, but will spur use of modern methods, it will set up demonstration farms.

This pattern also applies to coffee, which the company has high hopes for.

• **Plans**—Other projects now getting under way:

A road is being built into the interior towards French Guinea. This will open up palm oil areas in that colony and Liberia.

Liberia Co. plans to build a short railroad line which will haul out Bomi Hill iron ore.

Liberian International Airways, Ltd. plans to start service soon along

of Liberia and from Monrovia to Lagos. It will use the \$5-million base built by the U. S. Army at Roberts Field during the war.

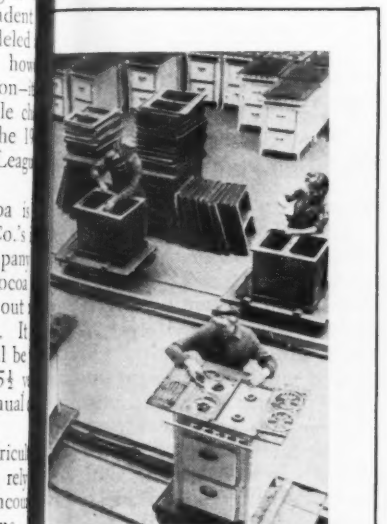
The directorship of Liberia includes some well-known names. Robert Smith came to the company as the War Production Board, and a New York advertisement, Kudner Agency, Inc. Among those on the board are: former diplomat Joseph C. Grew; retired Fleet Admiral William F. Halsey; General Election board chairman Philip D. Reed; T. Ryan, president of World Commerce Corp.

SETS FOR AUSTRALIA

MELBOURNE—Keeping the woollen figures in shape has been costing Australia \$1.5-million a year. Reason: the corset materials have had to be imported from the U. S.

Thanks to an American investment of \$100,000, that \$1.5-million expenditure now be wiped out. The investment was made by the Penn Elastic Co., Philadelphia. It has completed arrangements to produce the corset materials in Rocklea, Queensland.

The \$100,000-worth of equipment already been bought by Penn Elastic and is ready to be shipped.



FOLLOWUP

Gas stoves are coming off Moscow production lines in an increasing number. Reason: Recent completion of the Moscow-Saratov pipeline which links the city with the natural gas fields on the Volga. The \$20-million line is the Soviet's longest, stretches about 500 miles. Its construction was part of the Five-Year-Plan drive to exploit natural gas resources.

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ALPS BLUE BOX — 6 cheeses: SWISS, Sharp Aged (American) CHEDDAR, BRICK, REXOLI, GLARIUS, CAMEMBERT. Pack A, 5 lbs. net wt. \$5.85; Pack B, 3 1/2 lbs. \$4.15.

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READERS REPORT:



PHOENIX-STYLE banking; photo from Arizona Times, Oct. 1, 1947

Fly-in Banking

Sirs:

You recently carried a photograph and a letter on a bank deposit being made by helicopter in Houston, Tex. [BW—Nov. 22'47, p120]. The letter comments that this was "the first helicopter-borne bank deposit ever to be made." Foley's department store, it appears, opened on Oct. 20, and the deposit was made on or about that day.

Far be it from me to be the fly in Foley's ointment, nor do we wish unduly to preen our feathers; BUT as the clippings and photograph (above) will show, the First National Bank of Arizona, Phoenix, can claim a few days' priority out here in the land where there is lots of room and lots of time.

The story: First National Bank of Arizona built the first actual postwar branch bank in Phoenix, and the bank was opened to the public on Oct. 1, 1947. . . . To herald this event six radio stations here were used for the week preceding the opening, full-page space was taken in the newspapers, thousands of letters were sent to the residents of the district served by the new branch, and finally, caught by the fever which swept the town, the builder of the branch, a well-known Phoenix contractor, name of Elmer W. Duhamel, announced he wished to be the first depositor. The bank contacted the Arizona Helicopter Service and arranged to have it meet Mr. Duhamel at his ranch and bring him to the bank and taxi it to the new drive-in window. Thus history—in Arizona, anyway—was made. . . .

Texas is a big state and so is Arizona,

and there is lots of room for a helter in Texas and one in Arizona whether Foley's was first or First National Bank of Arizona was first, nearly so important as the fact that here in the great Southwest, innovations are the order of the day. . . .

GEORGE V. CHASE

FIRST NATIONAL BANK OF ARIZONA,
PHOENIX, ARIZ.

Marshall Plan's Effect

Sirs:

In your concluding "pro's and con's on the Marshall Plan [Report to Editors, BW—Nov. 22'47, p67] the one small item you neglect to mention on the liability side. It is that economists hold that the effect of plan is purely inflationary, and can possibly produce economic chaos in this country through skyrocketing prices.

The fact that even Sen. Taft is apparently in favor of bank and credit controls, and rent and export controls, seems to point to the fact that there is a grave danger that in order to avoid a runaway inflation of prices, we shall be compelled to institute rigid controls over all phases of our economy—and that will be introducing in this country the very thing that the Marshall Plan is supposed to be contending against abroad.

In other words, we are being maneuvered into a position that is incompatible with a free economy.

PHILIP H.

LOS ANGELES, CALIF.

• It is our conclusion—based on a

...not only of Western Europe's but also of the probable trend of business generally in 1948—that the Marshall program will not push business activity any higher than the level that has existed this past year. Similar to the general pressure on prices, there will be no greater than it has been. Of course, trouble spots may appear; these spots prices will be in danger of moving higher. Our report singled out such trouble spots and tried to put them in proper perspective. Despite the tight spots, the facts do lead to the conclusion that the economy must revert to wartime controls if the Marshall program is continued. The President's price-control recommendations, which we regard as wise and in good measure unnecessary, do not involve this. In the amount Europe requires, it simply cannot be granted without real hardship and inconvenience to the U.S. Nevertheless, it was the conclusion of our analysis—and we continue to hold that the gains to be realized from the Marshall aid far outweigh the cost.

Europe's Coal Needs

Our report on "The Marshall Program: What It Means to American Business," is interesting and informative.

I believe present procedure initiates the purchase of these commodities at foreign missions located in the United States. I am interested in the coal requirements for abroad and would like to learn the name and address of these foreign purchasing agents.

R. V. TOWER

BALTIMORE, MD.

Coal requirements from the United States as set up in Paris by the Committee of European Economic Cooperation are (in millions of short tons):

1948....	45.2	1950....	15.4
1949....	27.6	1951....	6.6

The bulk of the coal will go to France and Italy, the rest to other Western European countries.

A list of the foreign purchasing missions in this country appeared in Business Week on Aug. 16, 1947, page 98.

Willys' Story

Just a note to say thanks for the splendid Willys-Overland piece that you ran about our Institutional Day (Oct. 25 '47, p36). It told the story and it told it well.

The folks here at Willys-Overland are delighted.

NEIL T. REGAN

WILLYS-OVERLAND MOTORS, INC.,
CLEVELAND, OHIO

The Pittsburgh Steel Foundry Corp.

OF GLASSPORT, PA.

... does a 100 hour job in 44 minutes

TECHNICAL SALES SERVICE REPORT



PROBLEM: To remove this 52-inch, 7-foot high riser from a 50-ton cast steel anvil block.

SOLUTION: We recommended cutting with an Airco No. 40 Radiograph equipped with a Style 6740 water-cooled torch. Two cuts were made; the first five inches from the finish line. Then, after inspection (no defects were visible), the second and last cut was made one inch from the body of the block. This entire job was completed in 44 minutes.

Pittsburgh Steel Foundry Corp. estimates flame cutting to this close tolerance permitted a saving of approximately 100 hours machining time.

R. F. Helmutkamp
Airco Technical Representative

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THE TREND

WILL THE MARSHALL PLAN WORK?—II

FIRST KEY to the success of the Marshall Plan is productive effort. Productive effort hinges on manpower. To see what chances the Marshall Plan has of reaching its economic goals, we have made (through McGraw-Hill's World News correspondents) a special survey of Europe's manpower.

The survey uncovers facts that, as far as we know, have never before been reported. Number one:

Less manpower is available now for productive work in the nations of Europe than there was before the war. Total employment in industry, commerce, and agriculture is less than in the late 1930's.

This fact is not officially recognized. It gets no mention in the Paris report of the 16 nations. It does not appear in the Appendix Report of the Paris Manpower Committee. It is passed over in the Krug, Nourse, and Harriman committee reports.

There is much official recognition in this country of the fact that to attain Marshall Plan goals "European production must expand well beyond prewar levels." The phrase is quoted from the Harriman report. But the obvious difficulty and probable impossibility of doing it with less productive manpower is passed over completely.

The reason for the oversight may be that our own manpower situation stands in sharp contrast to that of Europe.

We have nearly one-third more workers employed than in 1939—and so we have far more production. If we compare our experience with Europe's, we see:

(1) Our labor force has grown by 8-million. Our population is rising steadily and we suffered relatively few war losses. Europe's labor force, on the other hand, is no larger than prewar. Population there grows slowly and war losses were severe.

(2) We have put 6-million of our prewar unemployed to work. Europe in the late 1930's had a lot fewer unemployed, proportionately, than we did.

(3) Although more Americans now work for the government as civilians or soldiers, European governments' increased use of manpower is far greater than ours.

THE FINAL SCORE shows:

We have 14-million more workers—2-million of them in government, 12-million in industry, commerce, and agriculture. But Europe has no more workers. And more of them are in government. So there is in general no increase in the number of workers in industry, agriculture, and commerce. Our survey shows 1% fewer in Britain than in 1939 and 4% fewer in France, for example. There are 3% more in Sweden, 5% more in Holland. But only Italy has idle hands.

Details differ from country to country. France's armies

are smaller than prewar. Britain's are larger. But France's civil service has swollen more than Britain's. Frenchmen are working longer hours than prewar, but many Frenchmen's labor is wasted in black-market trading. Britain has drawn labor out of distribution into production, but it has shortened weekly hours of work.

The net result, however, is the same everywhere. No matter where you turn, you find that over-all productive effort is reduced by larger armies, bigger civil service, black markets, or shorter hours.

On top of this limited productive effort, and intensified by it, are serious defects in distribution of work. Europe in general is trying to put its limited manpower to the best use. We learned during the war how many essential jobs can be filled at the expense of the less essential. We also learned that it is hard to do. And Europe is not doing too well at it, even though some output, such as that of machinery in Britain, has been raised.

Britain, for example, has succeeded in getting more people to work on farms, but it has fewer miners digging coal. France has the reverse—more coal miners, but fewer farm workers.

Neither nation has been able to lick both critical problems at the same time. The British, too, have traditionally been better producers of coal than the French. And the French have been the better growers of food. But that's not the way their labor is distributed now.

OUR SURVEY of manpower in European nations important to the Marshall Plan discloses, in short:

(1) Their over-all productive effort is limited.

(2) Their bigger governments sit astride shrunken economies.

(3) Their manpower is badly distributed. The nations lack the drives of a free market or a slave state, or a social inspiration like that we had in the war, to put manpower where it is needed most.

Everyone recognizes that the Marshall Plan is a gamble.

Instead of recovery in four years we may get only a to-day relief—"Operation Rathole." The plan will fall short of its goals if Europe cannot export enough to pay for its imports. Troubles with manpower, which have not been recognized, make the plan even more of a gamble.

If Europe and the U. S. are to get fair odds on the "calculated risk," ways must be found to get more labor to put it to better use, and to make it more productive. But Europe's manpower supply cannot be boosted much. And, at best, it will be difficult to shift more of it into essential production. So the nations' ability to increase productivity by improving their capital plant will be crucial.

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